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ABSTRACT

The following papers were prepared for a seminar on sport for older people: (1) "Gerontological Aspects of Physical Exercise" (Eino Heikkinen); (2) "Sporting Activities in the Individual Life from the View of Older Persons" (Henning Allmer); (3) "Reasons Why Decision-Makers Should Urge Old People to Practise Physical and Sporting Activities" (Camus); (4) "Physical Activities for the Elderly" (H. Levarlet-Joye); (5) "50--All to Play for--The Sports Council's Campaign for the 'Middle-Aged'" (E. Dendy); (6) "Sport for Older People in Switzerland: Structure and Problems" (Schneiter); (7) "Concepts Underlying Dutch Government Policy on Sport for Older Persons" (T. Straub); and (8) "The Trainer in Senior Sport in the Federal Republic of Germany" (Dr. Meusel). (JD)

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Committee for the Development of Sport

STRASBOURG
1985

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SPORT FOR OLDER PERSONS

NOTE BY THE SECRETARIAT

The papers reprinted in this booklet were prepared by the authors for the seminar on 'Sport for older persons' organised for the CDDS by the authorities of the Federal Republic of Germany and in particular the Bundesinstitut für Sportwissenschaft, the Culture Ministry of Nordrhein-Westphalia on behalf of the Länder, and the Federal Ministry of the Interior, should have taken place at Frankfurt and Duisburg from 29 June to 5 July 1983.

The views expressed in this publication are those of the authors and do not necessarily reflect those of the Committee for the Development of Sport.

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CONTENTS

		Page
Note by the Secretariat		i
Introduction by Dr. Dietrich KAYSER		1
Authors		
Prof. Eino HEIKKINEN	Gerontological aspects of physical exercise	4
Prof. Dr. HENNING ALLMER	Sporting activities in the individual life from the view of older persons	39
Prof. CAMUS	Reasons why decision-makers should urge old people to practise physical and sporting activities	54
H LEVARLET-JOYE	Physical activities for the elderly	61
E DENDY	50 - All to play for - the Sports Council's campaign for the "middle aged"	68
Dr. SCHNEITER	Sport for older people in Switzerland: structure and problems	71
T STRAUB	Concepts underlying Dutch Government policy on sport for older persons	75
Prof. Dr. MEUSEL	The trainer in senior sport in the Federal Republic of Germany	80

INTRODUCTION

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The seminar "Sport for older people" should have taken place in summer 1983. It had been organised under the auspices of the Committee for the Development of Sport of the Council of Europe by the Federal Republic of Germany. Though this seminar was cancelled because participation from the member countries of the Council of Europe was too low, it does not mean that the topic has become less important. The ever-increasing number of older people in most of the member countries of the Council of Europe is a sufficient reason for continuing with this topic. As a first step the CDDS has decided to publish the available questions, some selected research results, and experiences in the practice with sport for older people.

This publication contains the contributions which had been prepared for the 1983 Seminar. It is hoped that it will initiate and stimulate discussions on "Sport for older people" and that a policy-oriented resolution may follow.

The topic was accepted according to the procedures of the different committees of the Council of Europe. But even at the preparatory meeting of experts in Strasbourg (April 1982), the problems of acceptable terminology for the participants became evident. The possibility of defining the topic more precisely was discussed.

When examining the variety of terminology, such as "the elderly", "senior citizens", "the aging", "the aged", "third age" etc, it became clear that there were different associations between the terms and the age groups. Moreover, it was argued that some age groups might feel that they were not "labelled" adequately.

If one accepts the UNESCO position taken as a result of the "World Assembly on the Elderly 1982", the term "aging" seems to be the adequate one. It interprets that aging is a lifelong process from birth to death. The "aging" are then primarily those people who live in that third or fourth of their life span in which the decrease of performance physically, psychically, economically and socially is at its highest rate. Thus the stereotyped conception of later parts of the life span is avoided and the continuous development of aging is stressed. This leads to elude more and more the notion "third age".

A more open approach to the problem of aging is especially important in sport. Compared to the levels of maximal performances in sport, decreases in performance happen much earlier in sport than in most other fields. This is especially obvious in organised competitive sport, where we can find "seniors", "aged" etc classified as such early in their thirties.

This range of the points which could be discussed in a seminar led to a decision to concentrate on a certain age. On the occasion of the first meeting in Strasbourg, it was agreed to look at the over-60s, and to stress the process characteristic of aging. This should be done by considering actions and programmes for the fifty-year-olds onward, and the characterising many of the developmental aspects for that life span from the point of view of sports medicine and sport psychology.

The term "older people" was however maintained for pragmatic reasons, for preliminary orientation and for continuity in sports policy. As a consequence, no special efforts were made to use a homogeneous terminology for the contributions to this publication.

In addition to the "age" aspect, the "sport" aspect of our topic is also a subject of discussion. Only in Scandinavia and the German speaking countries is there a broad definition of this term, comprising almost every physical activity, excluding work but including even those physically related games which require a certain effort. In most other countries, sport tends to be regarded as organised competitive sport. A general agreement could even not be reached during the preparatory meeting in Strasbourg whether "physical activity" or "physical exercise" should be added. Each has a different emphasis. Physical activity includes those activities used in therapy with older people where only minimal requirements of load are necessary. Physical exercise requires activities of a certain load or effort and suggests the adaptive and preventive effects of training. In order to specify the gerontological aspect from the point of view of sport science and sports practice, "sport and physical exercise for the aging" is the focus of interest in the following contributions.

The theoretical considerations for the topic "Sport for older people" were based on the following points:

1. It is necessary to change stereotyped concepts of older people in society into a concept of differential gerontology. This is the more necessary if one thinks of sports activities and of special target groups. This is the starting point agreed on in all contributions. As a consequence, it becomes important to know to what a degree the actual behaviour of older people is determined by common experiences of special groups (age groups, socio-political, socio-economic experiences), and what effects changes in situations and norms have on behaviour. These questions are addressed in the papers of H HEIKKINEN (Finland) and H ALLMER (Federal Republic of German,).

2. In order to to be able to decide on measures for improving existing conditions, it is necessary to collect knowledge on two points: (a) the relationship between movement activities and physiological consequences for this age group, (b) empirically based information on the movement behaviour in this age group. Answers to these questions can also be found in the paper of H HEIKKINEN.

3. The behaviour of older people is not only determined by the stereotypes other people have of them, but also by their own self-concept. Both concepts influence the attitudes towards and needs for sport and physical exercise. H ALLMER attends to these problems in his paper.

4. Those who have the authority or the duty to change the situation for sport activities for older people and thus influence the behaviour of older people in this direction must ask themselves what their justifications and motives are. A comprehensive study on these questions (demo-economic; socio-cultural· bio-psychological· educational) is presented by Y CAMUS (France). This contribution was itself of book size so that we were forced to print only the introduction and the summary of the 108-page manuscript.

5. Sometimes, broad reviews have a lack of specificity because they only refer to representative results and therefore give no clear model of reality. Deeper insight and a better model is to be gained if one tries to review regional results from different studies. The study from the French speaking part of Belgium, reported by H LEVARLET-JOYE (Belgium) is an excellent example of analysing the existing situation and of clarifying reality.

6. Organisational aspects determine to a large extent the potential sport activities of everyone. It is therefore necessary to analyse organisational structures and various programmes in sport for older people in different countries. One important question is whether it is possible to make more older people more active if one started such programmes already for the 50-year olds. Answers to this question are presented by E DENDY (United Kingdom). The advantages and disadvantages of a relatively independent structured sport for older people in Switzerland can be learned from the paper of C SCHNEITER (Switzerland). These problems are also discussed in the paper of T STRAUB (Netherlands), on the basis of the situation in his country.

7. It is beyond doubt that even the best programmes fail if there is not enough or not sufficiently trained staff. Great improvements in this area still seem to be necessary in many countries. H MEUSEL (Federal Republic of Germany) gives a good survey and analysis of the situation in the Federal Republic of Germany and makes proposals.

Collecting and editing these papers were only made possible by the patient authors and their readiness to accept some difficulties after the seminar had to be cancelled. We are very grateful to the authors for their skilful contributions.

GERONTOLOGICAL ASPECTS OF PHYSICAL EXERCISE

Prof. Eino HEIKKINEN, University of Jyväskylä (Finland)

INTRODUCTION

Physical exercise is generally regarded as a factor which influences the processes of aging, maintains functional capacity in old age, and improves the quality of life of the elderly. Knowledge about the role of physical exercise in the processes of aging is, however, controversial despite the evangelical claims by some exercise physiologists, as pointed out by SKINNER et al (1982), that exercise retards the aging processes. The aim of this paper is to investigate in the light of present-day gerontological data the extent to which the assumptions about the positive relationships between physical exercise and aging are true; ie to place physical exercise in the context of human aging.

This question has gained increasing importance during recent decades for several reasons. The lengthening of life-expectancy in old age has been faster than expected, and consequently the number of old people has increased rapidly in the industrialised societies. Changes in the panorama of diseases have led to a situation in which chronic conditions account for the majority of diseases. These are difficult to cure but disabilities and handicaps connected with them can be minimised by adequate services and self-care programmes.

The presence of chronic diseases as such does not tell much about the future development of the health and well-being of the elderly. The question is to what extent diseases limit a person's functional capacity and what might be done to promote the ability to cope with the activities of daily life among the aging populations. Life style is assumed to play an important role in this context, and health education programmes have been developed for the elderly, too, who, contrary to common beliefs, have appeared to be a highly susceptible target for health education (GERMAN 1979). The elderly have concrete problems for which they are seeking help and attempting to overcome by modifying their behaviour according to advice given eg by health care personnel.

The processes of aging and longevity are determined by several factors. Heredity, social and natural environment, way of life and level of health care are among the factors which correlate with aging and longevity (eg PALMORE 1970, 1982, PFEIFFER 1974). In this complex framework it is not easy to define conclusively the role of any single factor.

In present-day scientific literature there is a huge amount of knowledge about the processes of aging on the one hand and about the effects of physical exercise on the other. Several comprehensive reviews have also dealt with the relationships between physcial exercise and aging (eg HARRIS and FRANKEL 1977, SHEPHERD 1978, HOGSON and BUSKIRK 1981, SKINNER et al 1982). In these reviews the main emphasis has been on the aging of physiological systems and their response to physical exercise. Furthermore, only few studies describe relationships between aging and physical exercise on the basis of representative population studies. Even fewer longitudinal studies have been carried out.

Therefore it has not been possible to control all essential variables, and consequently the assumptions on the relationships between aging and physical exercise are still in several respects uncertain and may be biased.

There has also been a tendency to explain research findings within the framework of the epistemology of one-dimensional causality, while the epistemology of reciprocal causal logic might form a better model in attempting to explain the role of physical exercise in aging (MARUYAMA 1978).

Because the development of health is connected both with functional capacity and aging, this report is planned so as first to present an overview of the development of health and functional ability in the process of aging, and then, against this background, to attempt to elucidate the role of physical exercise as a factor which may modify the aging process and improve the fitness of the elderly.

HEALTH AND AGING

The impairment of health is one of the most important consequences of aging. Diseases and aging are not necessarily connected with each other as suggested by ecological studies (see BOURLIERE 1973, INSEL and MOOS 1974) which show that great variations exist in the health status of the elderly living in different cultural, social and natural conditions. Among the elderly living in the industrialised societies the prevalence of chronic diseases increases markedly with age: about every fifth of young adults has one chronic condition whereas two to three diseases requiring medical treatment are found among people aged 65 and over (eg KALIMO et al 1980, SVANBORG et al 1980, HEIKKINEN et al 1981). In careful clinical examination nearly ten diseases per person have been found among the aged (BRUCKEL 1975). In an international study carried out in eleven countries among persons aged 60 to 89 years (HEIKKINEN et al 1983) it was found that the majority of the interviewed persons reported at least one chronic disease already at the age of 60 years (Table 1). The older the population groups investigated are, the more selection has occurred and the health of the survivors represents the health of the most fortunate. Furthermore, when tests of functional capacity are carried out among persons of various ages, health problems prevent the older individuals from performing exercise texts, and therefore the results obtained are not representative for the whole age group. This is illustrated by Figure 1 which shows that about 93% of men aged 31 to 35 years could perform a bicycle ergometer test for assessing VO_2 max., whereas among men aged 51 to 55 years and 75 to 75 years 77% and 20% respectively were able to complete the test.

Health problems may also be important reasons for discontinuation of interests and hobbies. Among relatively young men about 15% reported such problems and among the older cohort the corresponding figure was more than 30% (HEIKKINEN et al 1984).

Chronic diseases may prevent participation in any kind of strenuous physical exercise. The proportions of such individuals in different age groups are different. Among 68-year old persons about 20% had chronic conditions which prevented them from practising physical exercise. On the other hand about 30% were regarded fit enough for even strenuous exercise without the

need for medical supervision or counselling. About one half of the investigated individuals would require a medical checkup and counselling were they to participate in physical exercise programmes (see HEIKKINEN and KÄYHTY 1977).

The prescription of exercise for the elderly is complicated by the increased prevalence of chronic diseases, changes in the environment, and the processes of aging, all of which demand a good adaptability on their part (SKINNER et al 1982). Medical personnel should therefore be trained both in the medical and behavioural aspects of physical exercise (see HARRIS and FRANCKEL 1977, HEIKKINEN and POHJOLAINEN 1983).

Factors which predict the development of health during the entire course of life are multiple and differ between individuals, groups of people and populations living in different social and ecological conditions. Where people living in the industrialised societies are concerned it has been observed in several studies that, generally speaking individuals of higher socio-economic status are characterised by a lower mortality rate, lower exposure to known health risk factors, and greater longevity compared to individuals of lower socio-economic status (see PALMORE 1970, 1982). Hereditary factors seem to explain only a part of the variation in longevity between individuals. The role of chronic diseases is also not so decisive as commonly assumed. On the other hand social and mental factors (eg meaningfulness of life, self-picture) and life style factors (eg smoking, nutrition) are assumed to play an important role when predicting the residual life expectancy among the aged (eg PALMORE 1970, 1982, ROSE and BELL 1971, PFEIFFER 1974, MELLSTRÖM et al 1982).

Despite an obvious increase in the prevalence of chronic diseases with an advancing age a considerable proportion of the elderly regard themselves as healthy (Table 2). This finding reflects different things: the level of aspiration may change with age, and some symptoms are accepted as normal consequences of aging and the elderly can cope with them without major problems (eg TORNSTAM 1978, SVANBORG et al 1980, HEIKKINEN et al 1981). Self-perceived health is a conception which has its own value and importance and is not merely a validity problem according to which objective clinical examination is needed either to confirm or to reject the subjective statement. On the contrary it has appeared that the elderly themselves can predict the future development of their health even better than a physician (LA RUE et al 1979, MASSEY and SHAPIRO 1982). It is the perception of health which influences the use of services and modifies the behaviour of the elderly. Therefore more attention should be paid in the future to the definition of health on the basis of self-perception.

An important phenomenon concerning the health status of the elderly is the decline in mortality rates even among the very old during the last 10 to 15 years (see HEIKKINEN 1982a). For example the lengthening of life expectancy at 65 in some Nordic countries (Figure 2) has been relatively fast since the end of the 1960s. Reasons for this decline are not known. The fact that mortality has declined in all age groups among the elderly shows that the phenomenon is not bound to one generation cohort only, and suggests that changes that have occurred in these socieities during the last decades have been favourable to the maintenance of better health among the aged. Better standards of living, a less strenuous way of life, and advances in medicine have presumably all made their contribution to this positive trend.

The recent positive developments in health among the middle-aged and elderly suggest that there will be a growing number of retired people aged 60 to 75 years whose health is relatively good and does not form major problems for independent living and participation in social activities. On the other hand the number of old people, those aged 80 years and over, is increasing most rapidly. Among them biological agingprocesses start to be clearly manifested causing different kinds of disabilities and social dependence. For the former group society should develop possibilities for active and even creative life whereas for the latter group the most important question is to prevent premature institutionalisation through - activation and rehabilitation programmes and adequate supporting services (see Amann 1981, Chebotarev et al. 1981).

FUNCTIONAL CAPACITY AND AGING

Because the number of chronic diseases is not directly related to the level of an individual's functional capacity it has been necessary to develop tests to help in evaluating a person's ability for work, for the activities of daily life and for assessing functional aging.

A common starting point has been a decrement model which assumes that test which show high correlation with chronological age can be used for the assessment of an individual's performance in relation to his age peers and in this way describes his functional age. By combining the results of several tests an index can be constructed which describes a person's functional status by a single figure. In this context conceptions like biological age, physiological age, functional age, psychological age and social age have been used (see Viidik 1981, Shock 1981, Tobin 1983, Ries 1982, Heikkinen 1982b).

The tests most commonly used for the assessment of an individual's functional capacity in relation to aging are presented in Table 3. The studies based on this approach have shown that the decline in functions is test specific; in some tests there is a gradual and almost linear decline with age (eg VO_2 max.) whereas in certain other tests decline starts much later (eg isometric strength of muscles) and in certain functions (eg some areas of intellectual and social functions) no decline is observed. This situation is illustrated by our recent study among men belonging to different generation cohorts which at the time of the examinations (in 1981) were 31 to 35, 51 to 55 and 71 to 75 years old (Heikkinen et al. 1984). The results showed eg that in certain tests the decline from the youngest to the oldest group was less than 20 per cent, whereas in some other tests the corresponding figure was more than 60 per cent (Fig. 3). Inter-individual variation in functional capacity is great. When discriminant analysis was eg applied to the isometric strength of five muscle groups in the above-mentioned groups of men it was found that a considerable proportion of young men received results which corresponded to those of middle-aged men and even those of the elderly. Similarly, one out of six men among the elderly received results which corresponded to those of the middle-aged men (Fig. 4, Table 4).

Among young and middle-aged men those with higher education receive better values in several tests on functional capacity compared to their less educated counterparts (Heikkinen et al. 1974, 1975, Kiiskinen et al. 1980, Heikkinen et al. 1984). The level of education correlates positively eg with cognitive capacity and with psychophysiological functions. This might be related to motivation, previous experiences in corresponding test situations, the effect of work on certain abilities, and personality differences. The approach described above aims at assessing a person's general functional capacity and its variation in relation to age, way of life and living conditions. It can provide basic knowledge for intervention studies, for health education programmes and for reference values for use in clinical medicine. It also can give information about factors which predict the development of health and functional ability with age.

Another way of approaching the question of functional capacity is the assessment of the activities of daily life. This approach was originally developed for clinical purposes in geriatric medicine but was later enlarged to community medicine and epidemiological studies among the elderly (eg Katz 1963, Linn 1967, Shanas et al 1968, Kaufert et al 1979, Pfeiffer et al 1981, Chappel 1981, Fillenbaum and Smyer 1981, Heikkinen et al 1981). Functional capacity declines with the age particularly after the age of about 75 years due to the manifestation of biological aging processes. In the higher age groups women seem to have lower functional capacity than men. For example in an international study carried out in eleven countries among representative samples of elderly persons at various ages it appeared that already at the age of 60 to 64 years about hald of the interviewed individuals reported problems in daily life, and at the age of 85 to 89 years the figure was about 80 per cent among those who were living outside institutions. In several study areas women's functional capacity was lower than that of men. (See Heikkinen et al, 1983.)

The magnitude of social disability increases with advancing age. For example in Finland less that 2 per cent of persons aged under 75 years are permanently living in institutions whereas the corresponding figure for those aged 85 and over is more than 40 per cent (Fig. 5). The proportion of those who can manage without problems with the activities of daily life is about 50 per cent among persons aged 65 to 75 years but among the elderly aged 80 to 84 years the corresponding figure is only 20 per cent.

A decline in the functional capacity with age may be in part due to disengagement of the elderly from certain activities but apparently there is also a reciprocal relationship between functional capacity, activity and aging. The degree of engagement in physical exercise is different between populations living in different cultural and ecological environments. In some urban populations the majority of the elderly reported practising physical exercise whereas in certain other populations interest in physical exercise was low (Fig. 6). In several countries women participate less than men in various activities (Fig. 7). This may be a reason for the lower functional capacity of women in senescence (eg Heikkinen et al. 1983).

Among senescent people the status of health was strongly correlated with activity in general and life satisfaction (Tables 5,6), and on the other hand physical exercise was associated eg with health, activity in various organisations, and social participation.

Some attempts have been made to characterise persons who have maintained good functional ability until old age but due to various confounding factors the associations found between functional capacity and occupation, level of education and way of life among middle-aged persons are weaker among the elderly. Selective mortality which removes the most frail individuals from their cohorts is obviously one important factor which tends to equalise the survivors. It can be assumed that functional ability of people reaching retirement age in the future will be improved parallel with the improvement of their health status.

THE ROLE OF PHYSICAL EXERCISE IN AGING

Individuals habitually engaged in physical exercise are usually convinced about its omnipotent beneficial effect on health, functional capacity and general well-being. There are several reasons, as stated earlier, why in gerontological research it has been difficult to show conclusively that these assumptions are true.

Studies on the longevity of athletes have not given unambiguous results. Several authors have pointed to methodological and analytical problems in these studies (eg Rose and Cohen 1977, Brown and Milvy 1977, Shephard 1978). The average life-expectancy of for example skiers who continue competing in old age suggests a favourable effect of the sport (Karvonen 1977). It has, however, been difficult to evaluate the specific effect of skiing in relation to other relevant factors like abstinence from cigarettes and low body fat content which characterise endurance competitors. Another confounding factor is the incidence of coronary episodes which may be lower in endurance athletes thereby increasing their life-expectancy without influencing longevity in general (see Shephard 1978).

The relationship of physical exercise and "aging diseases" is also a controversial issue. The prevalence of several diseases increases with aging (eg diabetes and obesity, hypertension, ischaemic heart diseases, peripheral vascular diseases, strokes, chronic chest diseases and osteo-arthrosis). In these conditions it is often difficult to dissociate the changes caused by the processes of aging from pathological alterations. Physical exercise has proved to be beneficial both in the prevention and in the treatment of most of these diseases (see Shephard 1978, Harris and Frankel 1977). As far as the prevention of these diseases is concerned it has, however, been difficult to evaluate the specific effect of physical exercise among the multiple aetiological factors associated with the diseases. Concerning the rehabilitation of the diseases it has been shown by intervention studies that physical exercise can eg normalize glucose metabolism in certain cases of diabetes, lower blood pressure in certain forms of hypertension, increase physical working capacity in patients suffering from ischaemic heart disease or peripheral vascular disease and improve the quality of life of patients with chronic obstructive lung diseases (see Shephard 1978). Unfortunately elderly people have only rarely been objects in intervention studies, and it is therefore not known whether the above-mentioned pathological conditions can be prevented or treated by physical exercise also in old age.

On the other hand there are a few studies which show that physical fitness can be improved by physical exercise at any age. The investigated functions include aerobic power, anaerobic power, strength, speed, muscular endurance, flexibility, balance, reaction time, movement and reflex times, neuromuscular coordination, the symphatetic and parasymphatetic nervous system and respiratory functions. An improvement of 10 to 20 per cent by physical training programmes lasting for at least two months have been found also among the elderly (eg de Vries 1970, Hollman and Liesen 1972, Adams and de Vries 1973, Suominen and Heikkinen 1975, Shephard 1978, Suominen 1978, Hollman et al 1981, Bringman 1982, Skinner et al 1982). Badenhop et al. (1983) have shown that endurance training at 30-45 per cent of the range between the subject's resting and maximum heart rate is an adequate stimulus in older individuals to produce changes in VO_2 max. Long-term physical training programmes could have even more pronounced effects but programmes lasting one or more years have not been implemented.

It is apparent that in several fields of physical working capacity and psycho-physiological functioning physical exercise can set back the deterioration associated with aging. The rate of deterioration seems, however, to proceed at the same rate as among non-exercising individuals the functional levels being 10 to 20 per cent higher among those exercising. This is illustrated by figure 8 which shows the levels of certain physiological and psycho-physiological functions among physically active and sedentary men at different ages (Heikkinen et al. 1984).

It has been suggested by Fischer and Parizkova (1977) that functional involution during aging is the primary process while morphological involution is secondary. If this is true it would mean that morphological changes induced by aging and inactivity might be postponed by maintaining the functional capacity of an organ. Involution of skeletal muscles for example can be retarded by physical exercise and it is possible to cause anabolic reactions in them in old age by even relatively short exercise programmes (eg Suominen and Heikkinen 1975, Liesen et al.1975, Suominen et al.1977). Mineral density of bones is reported to be higher in physically active individuals at all ages (eg Nilsson and Westlin 1971, Dalen and Olsson 1974, Suominen et al.1984). This finding also supports the beneficial role of physical exercise in the prevention of the aging-associated morphological involution.

It has also been suggested that regular exercise reduces psychic anxiety, depression and aggression (see Shephard 1978) and produces greater emotional stability (Friedrich et al.1981, Lehr 1981). Pleasure and recreation are frequently mentioned reasons for the practice of physical exercise among the elderly (Heikkinen and Käyhty 1977).

It seems that research work is gradually providing more and more conclusive results on the beneficial effects of physical exercise in relation to the prevention of premature morphological involution and decline in physical and psycho-physiological functions with aging. The effects of exercise are not limited to these instrumental goals only but psychic well-being also seems to be increased through regular physical exercise. Whether physical exercise also results in lowered death rates and the lengthening of independent and qualitatively satisfying living remains to be investigated. Physical exercise as a part of lifestyle is culturally still a relatively new phenomenon as a mass movement. The number of individuals who have trained regularly throughout their entire course of life has been very low but in the future their number will be greater. This, together with the development of epidemiological methods will make it easier to study the still remaining questions about the relationships between physical exercise and aging.

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TABLE 1. Percentages of people reporting that they had had some accident, injury or chronic disease (Source: The elderly in eleven countries. A socio-medical survey. HEIKKINEN et al 1983)

Study area	Age Group (years)											
	Men						Women					
	60-64	65-69	70-74	75-79	80-84	85-89	60-64	65-69	70-74	75-79	80-84	85-89
Berlin (West)	77	71	79	76	85	82	79	80	81	86	85	79
Tampere	89	96	90	94	95	90	87	85	93	91	96	86
Florence	82	90	87	89	90	89	90	98	92	91	92	99
Kiev	75	88	83	77	75	84	92	90	96	80	83	73
Belgrade	89	87	86	86	88	84	84	94	93	93	94	91

TABLE 2. Percentages of people in five urban areas of Europe who considered their health to be good or fairly good. (Source: The elderly in eleven countries. A sociomedical survey. HEIKKINEN et al 1983)

Study area	Age Group (years)											
	Men						Women					
	60-64	65-69	70-74	75-79	80-84	85-89	60-64	65-69	70-74	75-79	80-84	85-89
Berlin (West)	42	45	47	36	39	33	38	34	27	31	29	34
Tampere	33	30	39	38	44	41	37	35	43	38	34	39
Florence	75	65	57	66	62	63	44	51	49	47	44	47
Kiev	27	24	17	15	19	14	16	14	8	10	7	3
Belgrade	45	42	42	37	42	32	36	31	28	29	25	24

TABLE 3. Correlations of tests used in the assessment of functional age with chronological age (HEIKKINEN et al 1984)

FUNCTIONAL SYSTEM	CORRELATION WITH AGE (RANGE)	AUTHOR
PSYCHOPHYSIOLOGICAL FUNCTIONS		
Vibratory sensitivity - finger	-.83	FURUKAWA et al 1975
Vibratory sensitivity - ankle	-.62	HEIKKINEN et al 1974
Vibratory sensitivity - wrist	-.59	HEIKKINEN et al 1974
Reaction time - simple	.52 - .26	CLARK 1980, DIRKEN 1972
Reaction time - 4 choices	.49	DIRKEN 1972
Flicker fusion frequency	-.48	JALAVISTO 1965
Tapping rate	-.44 - - .18	JALAVISTO 1965, DIRKEN 1972
Hearing loss (4000 Cps)	.66 - .38	MORGAN & FEVERS 1972 FOZARD & THOMAS 1975
Pitch ceiling	-.66	DIRKEN 1972
Accomodation of the eye	.88 - .57	FURUKAWA et al 1975 MORGAN & FEVERS 1972
Visual acuity	-.31	BORKAN & NORRIS 1980
PHYSICAL CAPACITY		
Vital capacity	-.77 - - .40	FURUKAWA et al 1975 HOLLINGSWORTH et al 1965
Maximum breathing frequency	-.33	DIRKEN 1972
Forced expiratory volume (1 s)	-.70 - - .38	HERON & CHOWN 1967 FOZARD & THOMAS 1965
Aerobic capacity	-.72	DIRKEN 1972
Grip stength	-.52 - - .21	HERON & CHOWN 1967 CLARK 1960
COGNITIVE FUNCTIONS		
Digit symbol test	-.59 - - .51	HEIKKINEN et al 1974
Memory for pictures	-.55	CLARK 1960
Picture recognition	-.49	DIRKEN 1972
Reasoning ability	-.49 - - .44	CLARK 1960, JALAVISTO 1965
Spatial ability	-.42	CLARK 1960
Word association latency	.42	CLARK 1960
Immediate recall	-.40	CLARK 1960
Categorisation	-.39	DIRKEN 1972
Maze learning	-.34	CLARK 1960

FUNCTIONAL SYSTEM	CORRELATION WITH AGE (RANGE)	AUTHOR
ANTHROPOMETRIC MEASURES		
Metacarpal osteoporotic index	-.78	DEQUEKER et al 1969
Bone cortex thickness	-.30	HEIKKINEN et al 1974
Height	-.68 - - .30	FURUKAWA et al 1975 JALAVISTO 1965
Skin elasticity	-.61	HOLLINGSWORTH et al 1965
Weight	.56 - - .15	FURUKAWA et al 1975 DEQUEKER et al 1969
CIRCULATORY AND EXCRETORY FUNCTIONS		
Systolic blood pressure	.69 - .16	MORGAN & FEVERS 1972, DIRKEN 1972
Blood cholesterol	.57 - .23	FURUKAWA et al 1975 HOLLINGSWORTH et al 1965
Creatine excretion	-.54	BORKAN & NORRIS 1980
Renal plasma flow	-.67	FURUKAWA et al 1975
Phenosulfonphthalein excretion	-.64	FURUKAWA et al 1975
Glomerular filtration rate	-.41	FURUKAWA et al 1975

TABLE 4. Classification power of the isometric strength discriminant function (HEIKKINEN et al 1984)

Actual group	Predicted group membership			
	Men born in			
	1946-50	1926-30	1906-10	n
Men born in				
1946-50	93 72%	31 24%	5 4%	129
1926-30	37 30%	58 46%	30 24%	125
1906-10	1 1%	15 15%	85 84%	101

TABLE 5. Relationships between selected background variables and life style variables among 80 to 84-year old men in Tampere (KENDALL's correlation coefficients)

	Health	Education	Family Structure	Activity in Organisations	Social Participation	Life Satisfaction	Loneliness
Health							
Education	-.19 *						
Family structure	.19 *						
Activity in organisations		.27**					
Social participation	-.32***	.21**		.39***			
Life satisfaction	.38***						
Loneliness	-.20*		.25*		.21*	-.18*	
Physical exercise	-.38***		-.24*	.26*	.41***		.22*

TABLE 6. Relationships between selected background variables and life style variables among 80 to 84-year old women in Tampere (KENDALL's correlation coefficients)

	Health	Education	Family Structure	Activity in Organisations	Social Participation	Life Satisfaction	Loneliness
Health							
Education							
Family structure							
Activity in Organisations		.18*					
Social participation		.16*					
Life satisfaction	.19*		-.20*	.17*	-.17*		
Loneliness	-.30**		.20*			-.39***	
Physical exercise	-.36**	-.30**				-.28**	

Options for figures:

Fig. 1 Percentages of persons in different age groups excluded after medical examination from the bicycle ergometer test, and the percentages of those who could not complete the text (HEIKKINEN et al 1984).

Fig. 2 The development of the life-expectancy of people aged 65 years and over in certain Nordic countries during this century (HEIKKINEN 1982a).

Fig. 3 Profiles of certain test results of functional capacity in representative samples of men at different ages. The results of the youngest cohort were defined as 100 per cent, and the results of two other cohorts were counted as percentages of the results of the youngest group (HEIKKINEN et al 1984).

Fig. 4 Histogram of the standardised values of the isometric strength discriminant function for men at different ages and classification limits (a, b) of the discriminant function (HEIKKINEN et al 1984).

Fig. 5 The estimated levels of functional abilities in daily living among people aged 65 and over in Finland in 1979.

Fig. 6 Percentages of elderly people in five urban areas in Europe who in the interview study reported that they did not practice physical exercise (HEIKKINEN et al 1983).

Fig. 7 Percentages of elderly people in five urban areas in Europe who reported participation during the previous year in the activities of clubs, associations or societies (HEIKKINEN et al 1983).

Fig. 8 The levels of certain functional abilities among representative samples of men at different ages in relation to physical exercise (See HEIKKINEN et al 1981). The index of functional capacity was constructed of test results on auditory threshold (1000 Hz), choice reaction time, tapping rate, vibration threshold (100 Hz), grip strength, leg extension strength, body fat percentage, skin stiffness and systolic blood pressure.

Figure 1

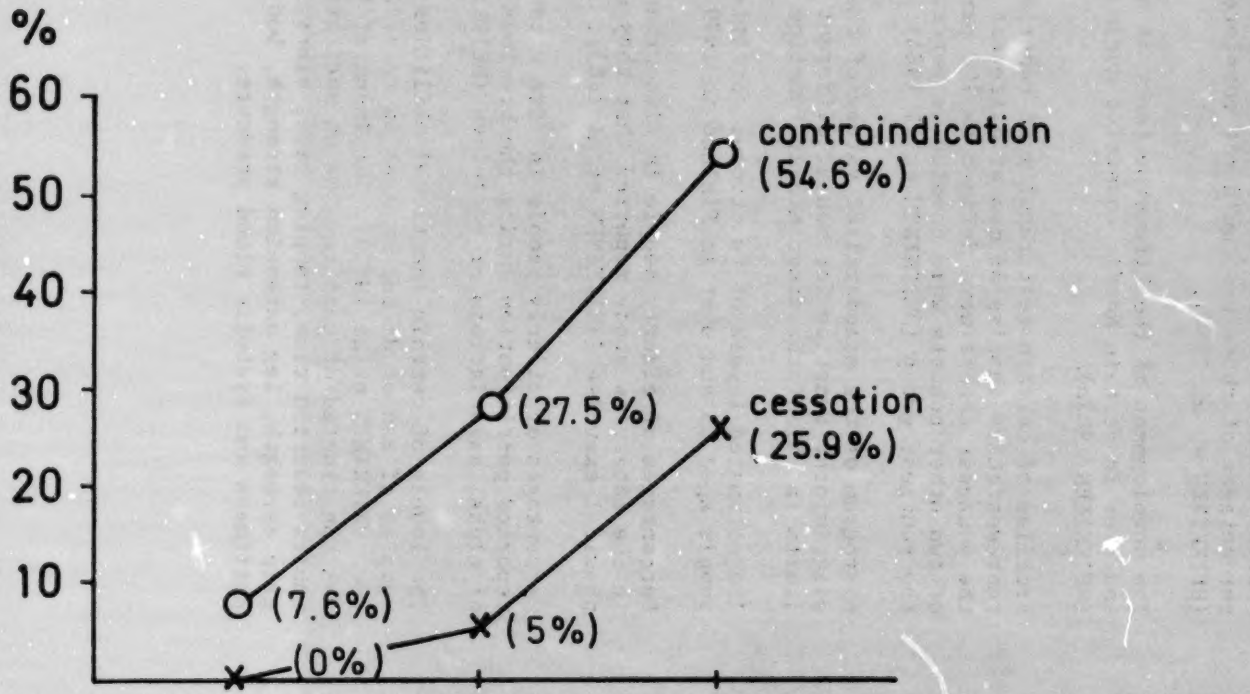

%
60
50
40
30
20
10
contraindication
(54.6%)
(27.5%)
cessation
(25.9%)
(7.6%)
(5%)
(0%)
1946-50
1926-30
1906-10
YEAR OF BIRTH

Figure 2

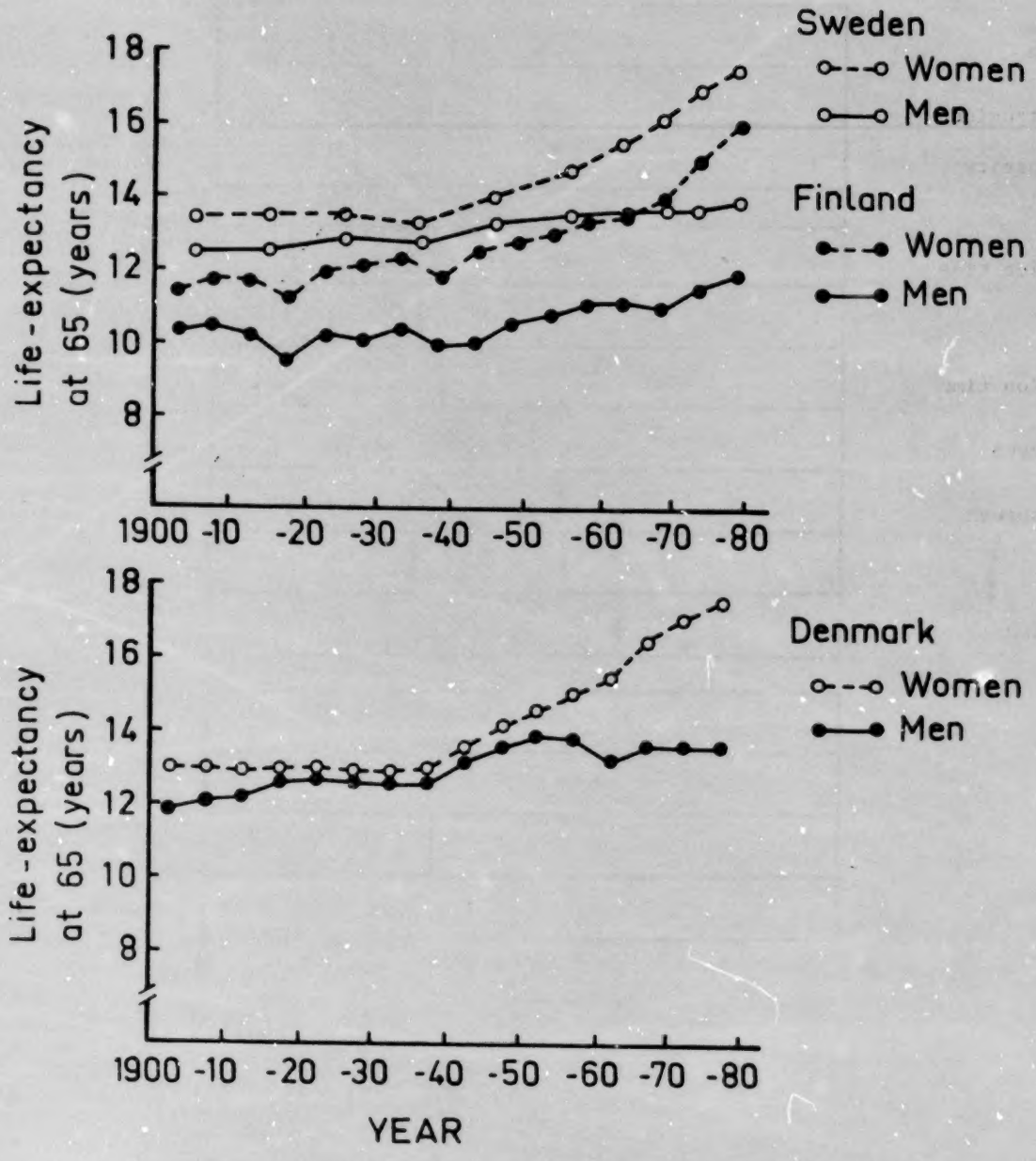

Sweden
Women
Men
Finland
Women
Men
Denmark
Women
Men
Life-expectancy at 65 (years)
18
16
14
12
10
8
1900 -10 -20 -30 -40 -50 -60 -70 -80
YEAR

Figure 3

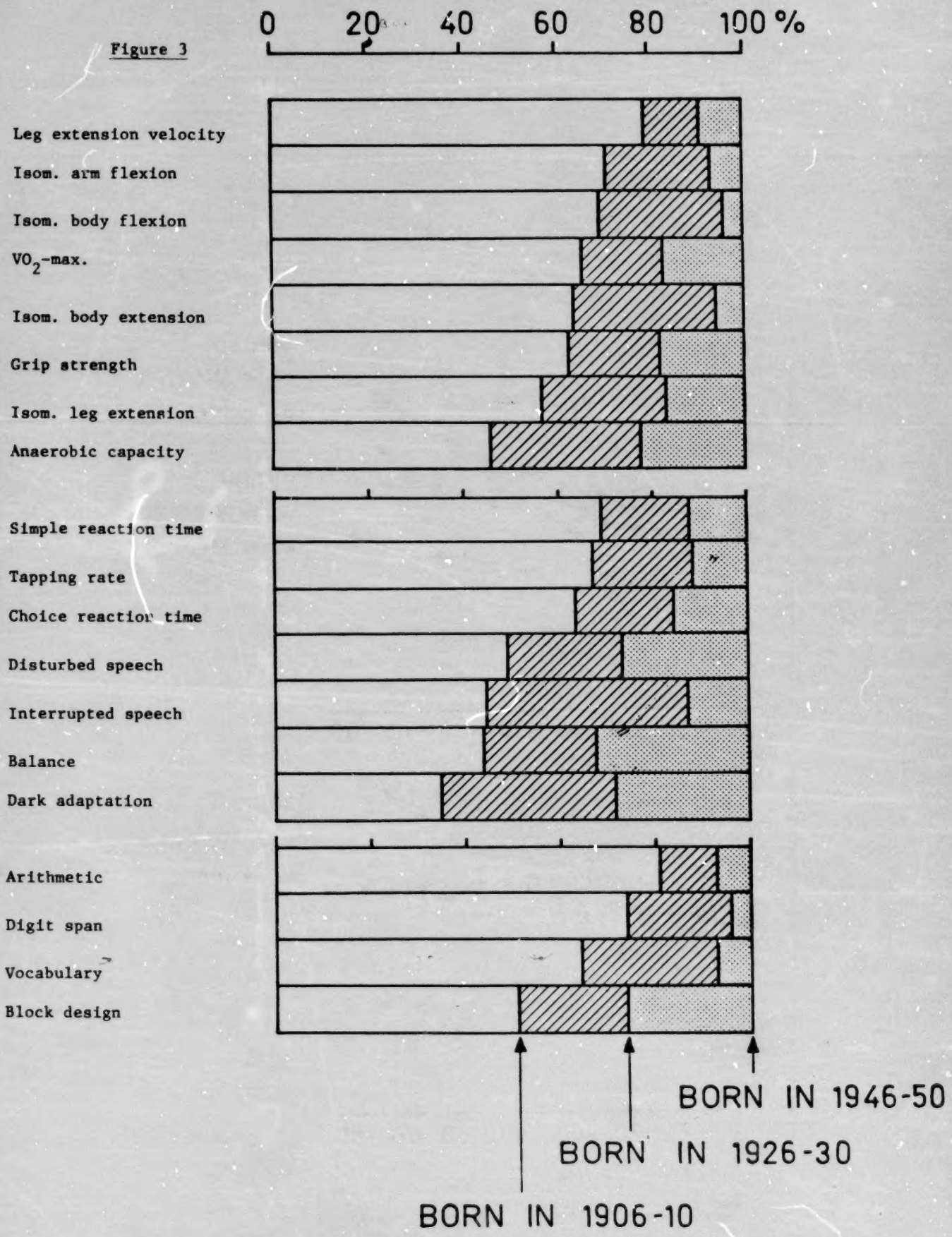

0
20
40
60
80
100 %
Leg extension velocity
Isom. arm flexion
Isom. body flexion
VO_2-max.
Isom. body extension
Grip strength
Isom. leg extension
Anaerobic capacity
Simple reaction time
Tapping rate
Choice reaction time
Disturbed speech
Interrupted speech
Balance
Dark adaptation
Arithmetic
Digit span
Vocabulary
Block design
BORN IN 1946-50
BORN IN 1926-30
BORN IN 1906-10

Figure 4

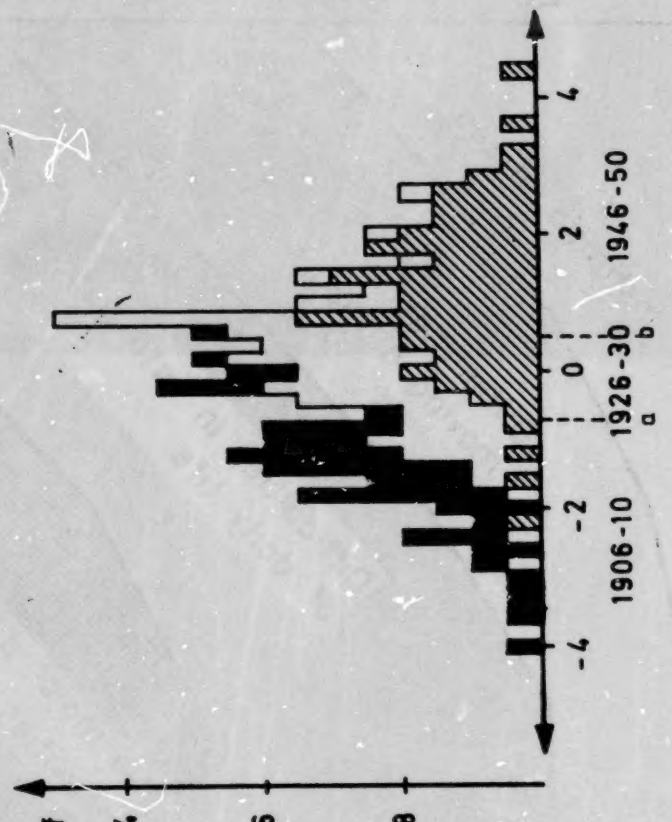


Figure 5

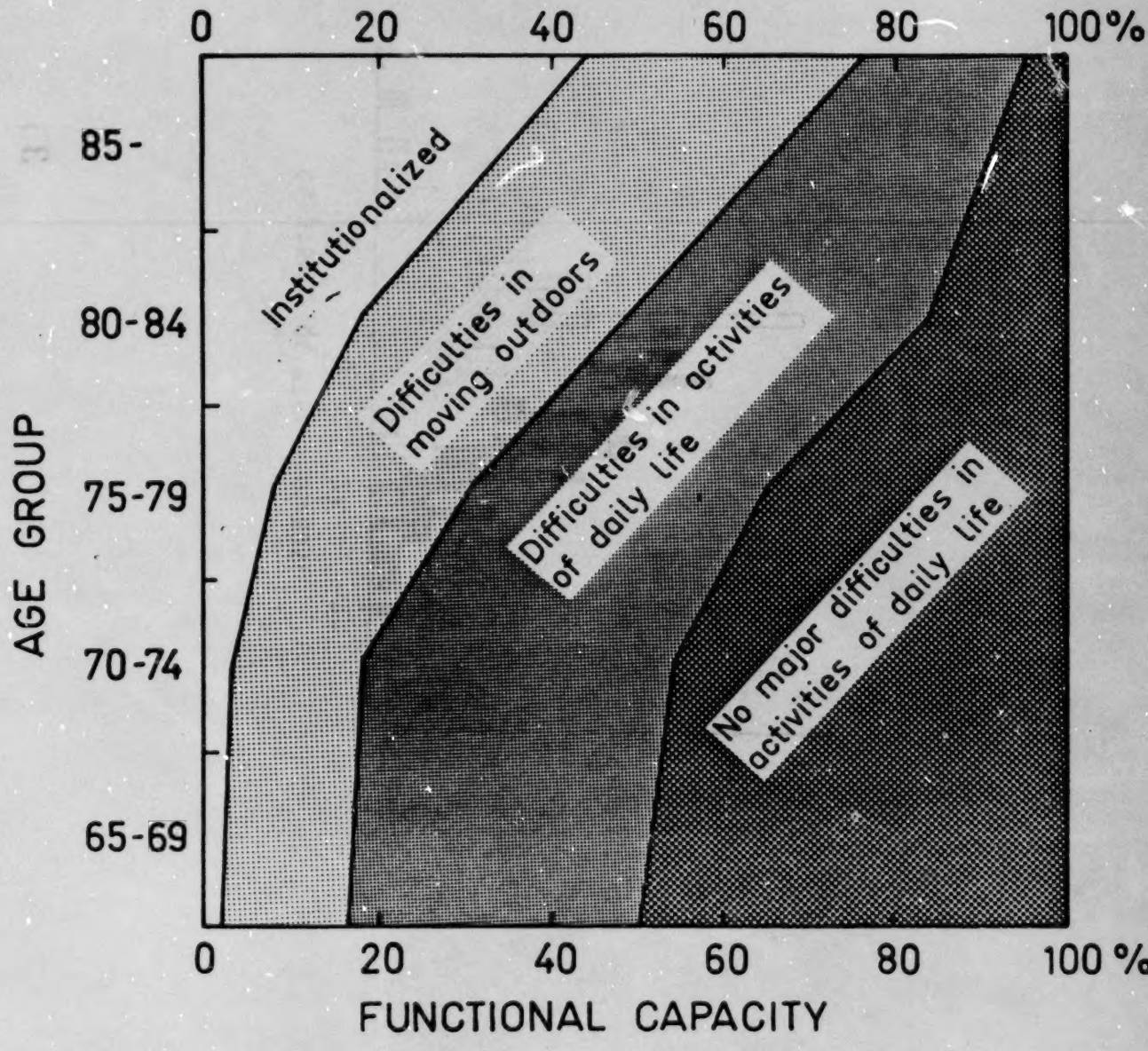

0
20
40
60
80
100%
85-
80-84
75-79
70-74
65-69
AGE GROUP
Institutionalized
Difficulties in moving outdoors
Difficulties in activities of daily life
No major difficulties in activities of daily life
0
20
40
60
80
100 %
FUNCTIONAL CAPACITY

Figure 6 a

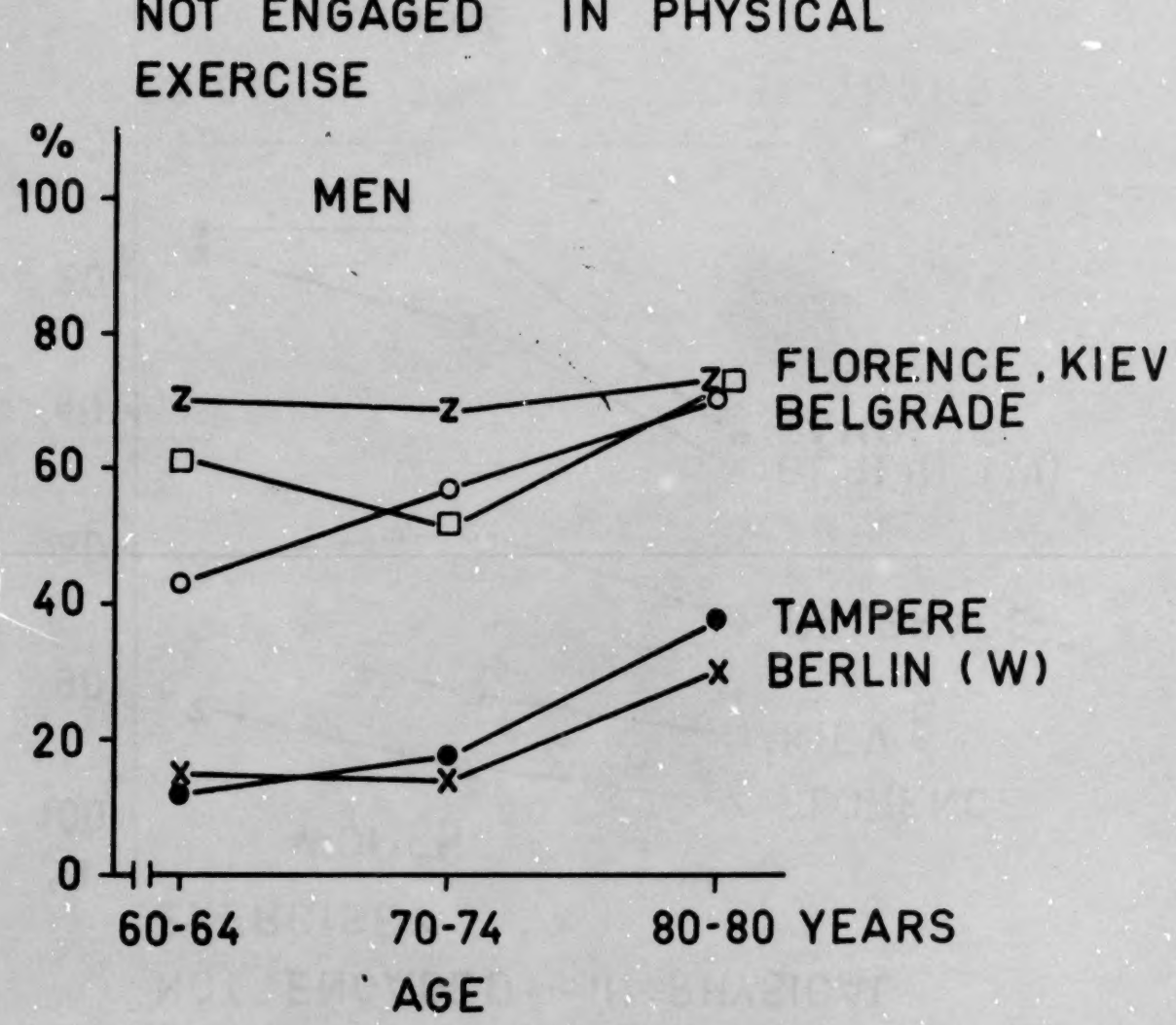

NOT ENGAGED IN PHYSICAL EXERCISE
%
100
80
60
40
20
0
MEN
FLORENCE, KIEV
BELGRADE
TAMPERE
BERLIN (W)
60-64
70-74
80-80 YEARS
AGE

Figure 6 b

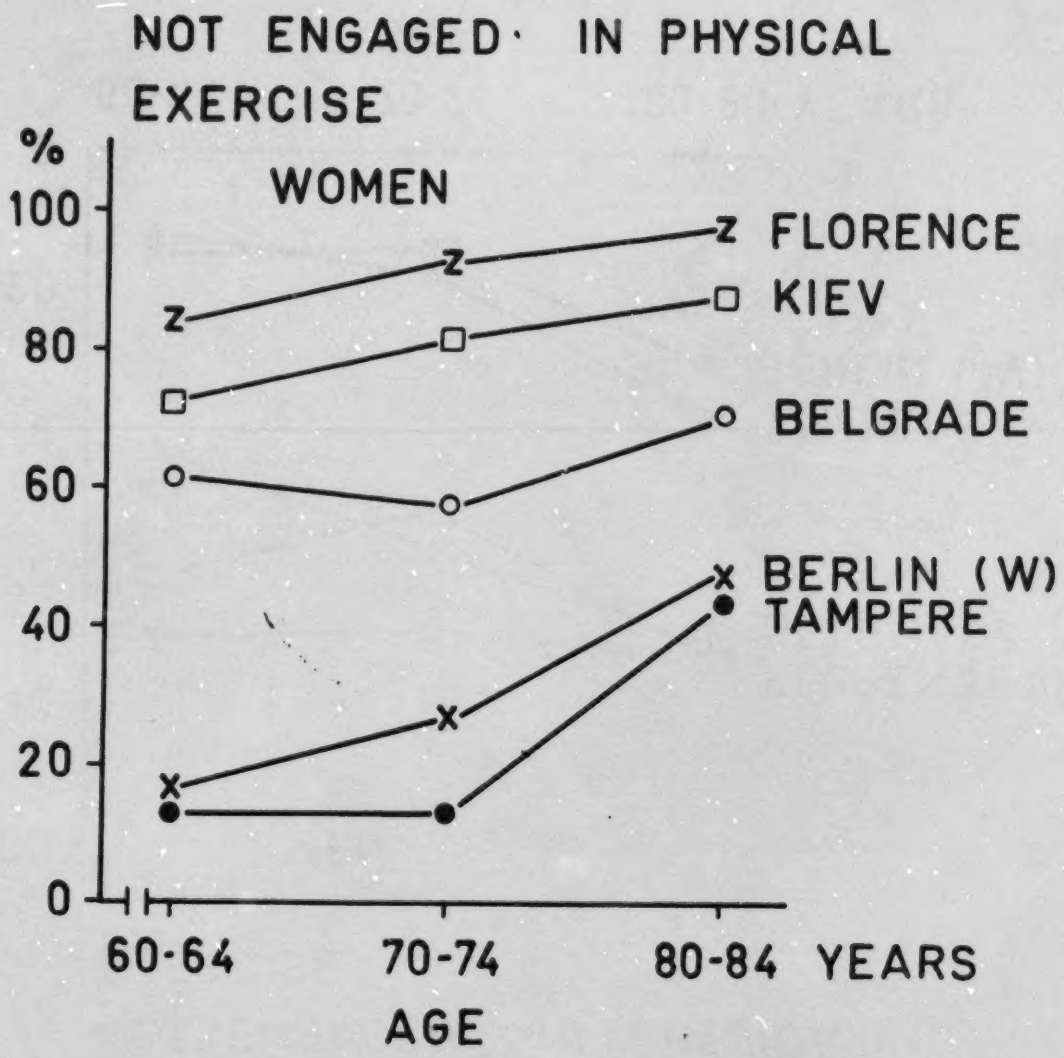

NOT ENGAGED IN PHYSICAL EXERCISE
%
WOMEN
100
80
60
40
20
0
FLORENCE
KIEV
BELGRADE
BERLIN (W)
TAMPERE
60-64
70-74
80-84
YEARS
AGE

Figure 7 a

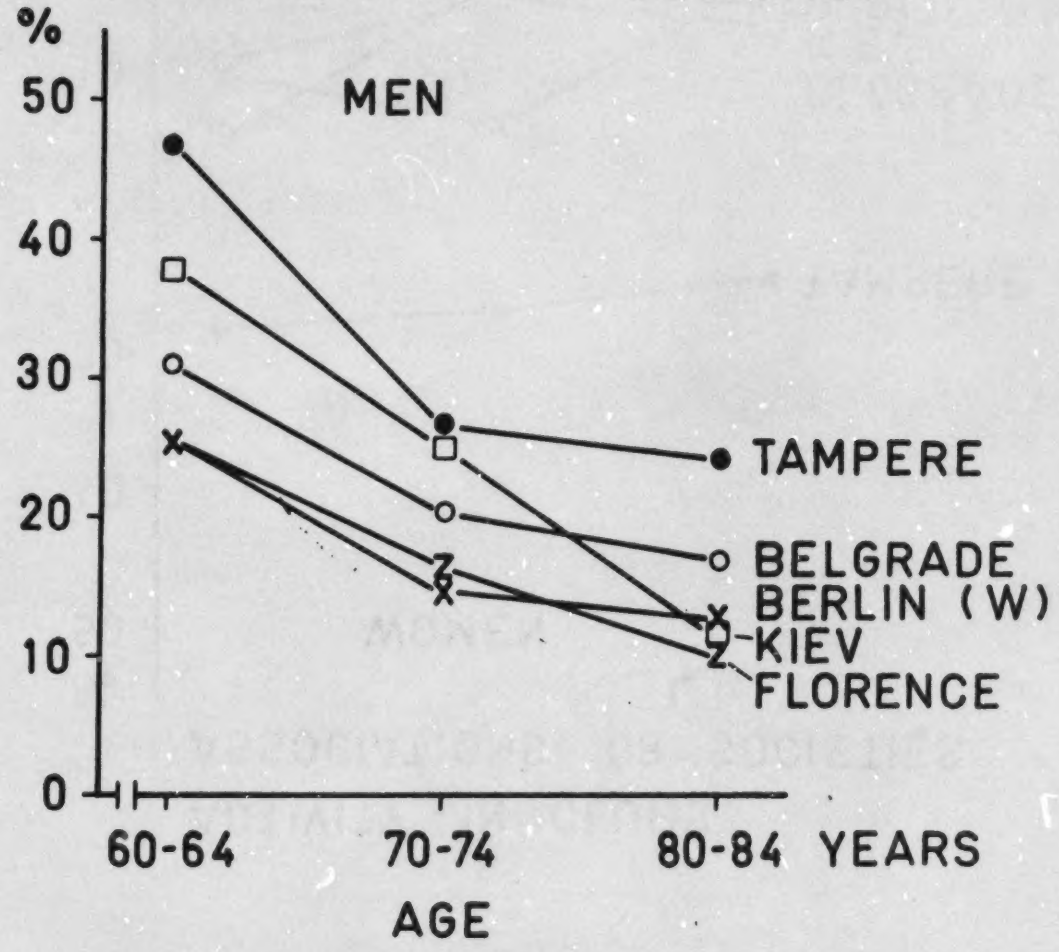

ACTIVITY IN CLUBS, ASSOCIATIONS OR SOCIETIES
%
MEN
50
40
30
20
10
0
TAMPERE
BELGRADE
BERLIN (W)
KIEV
FLORENCE
60-64
70-74
80-84 YEARS
AGE

Figure 7 b

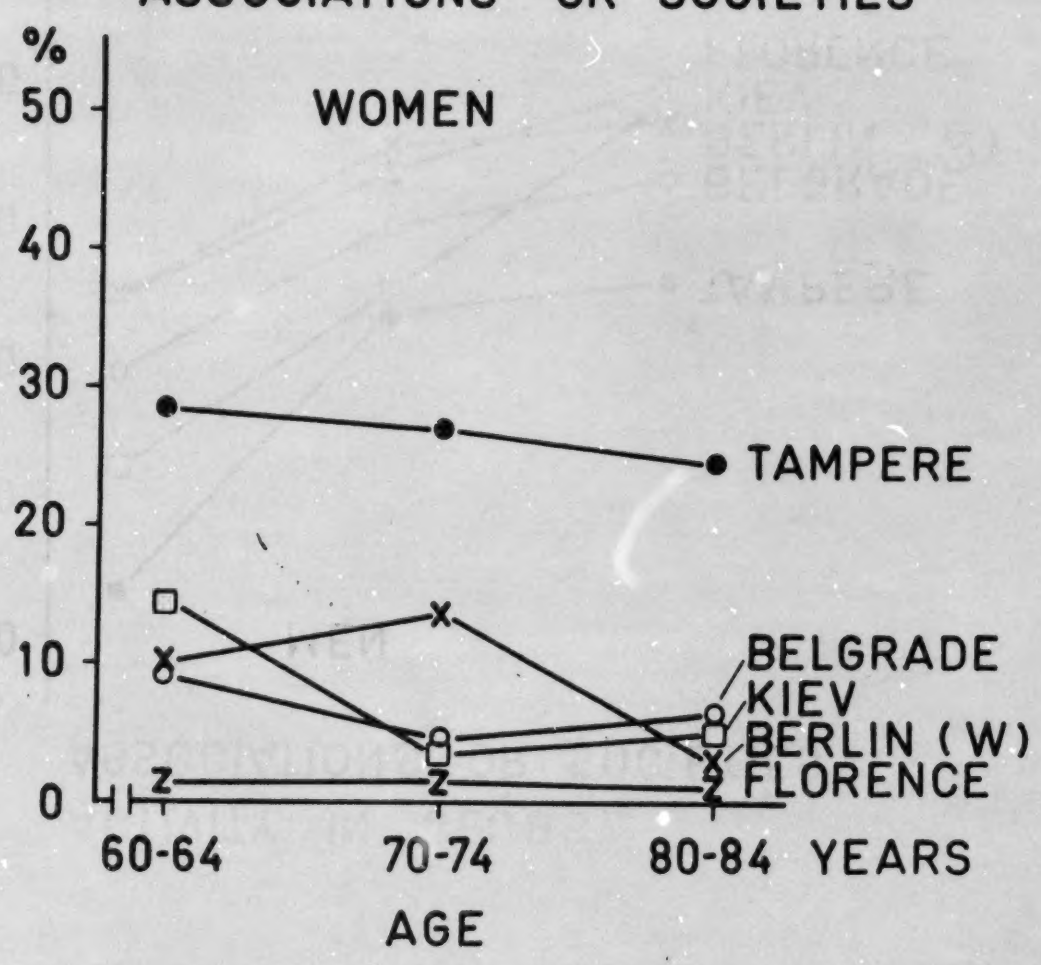

ACTIVITY IN CLUBS,
ASSOCIATIONS OR SOCIETIES
%
WOMEN
50
40
30
20
10
0
TAMPERE
BELGRADE
KIEV
BERLIN (W)
FLORENCE
60-64
70-74
80-84 YEARS
AGE

Figure 8 a

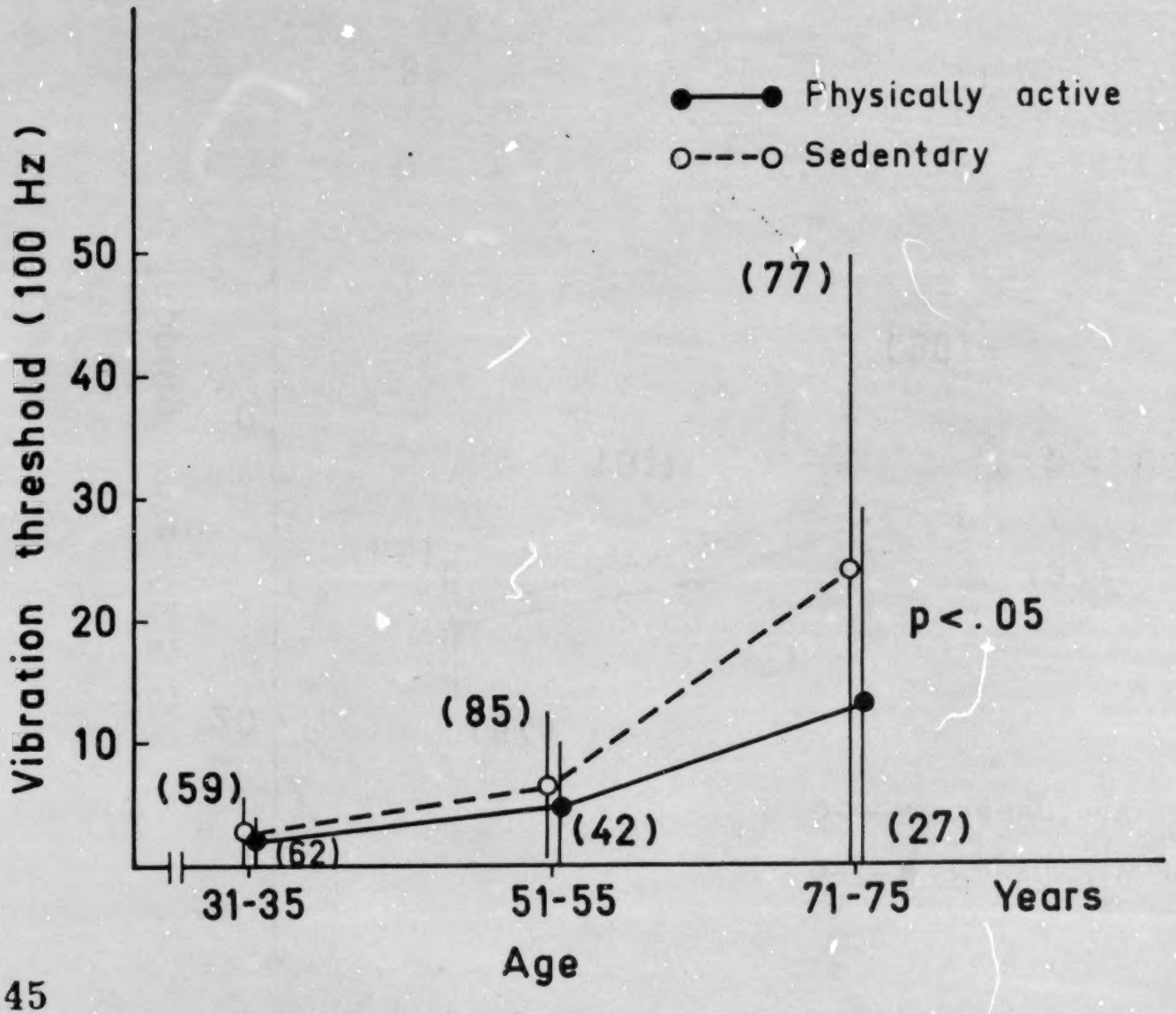

Physically active
Sedentary
Vibration threshold (100 Hz)
50
40
30
20
10
(77)
(85)
(59)
(62)
(42)
(27)
p<.05
31-35
51-55
71-75
Years
Age

Figure 8 b

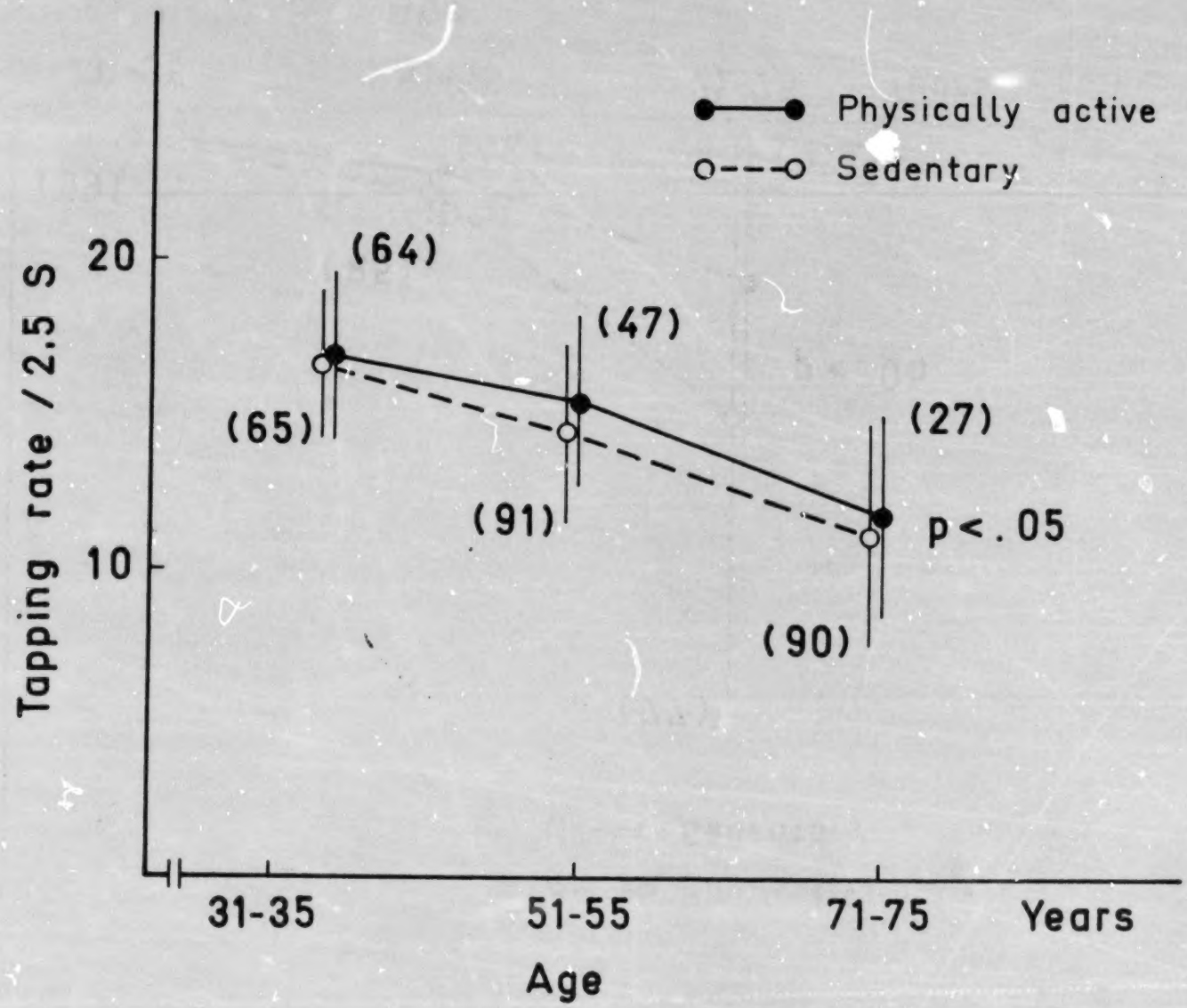

Physically active
Sedentary
Tapping rate / 2.5 S
20
10
(64)
(47)
(65)
(27)
(91)
p < .05
(90)
31-35
51-55
71-75
Years
Age

Figure 8 c

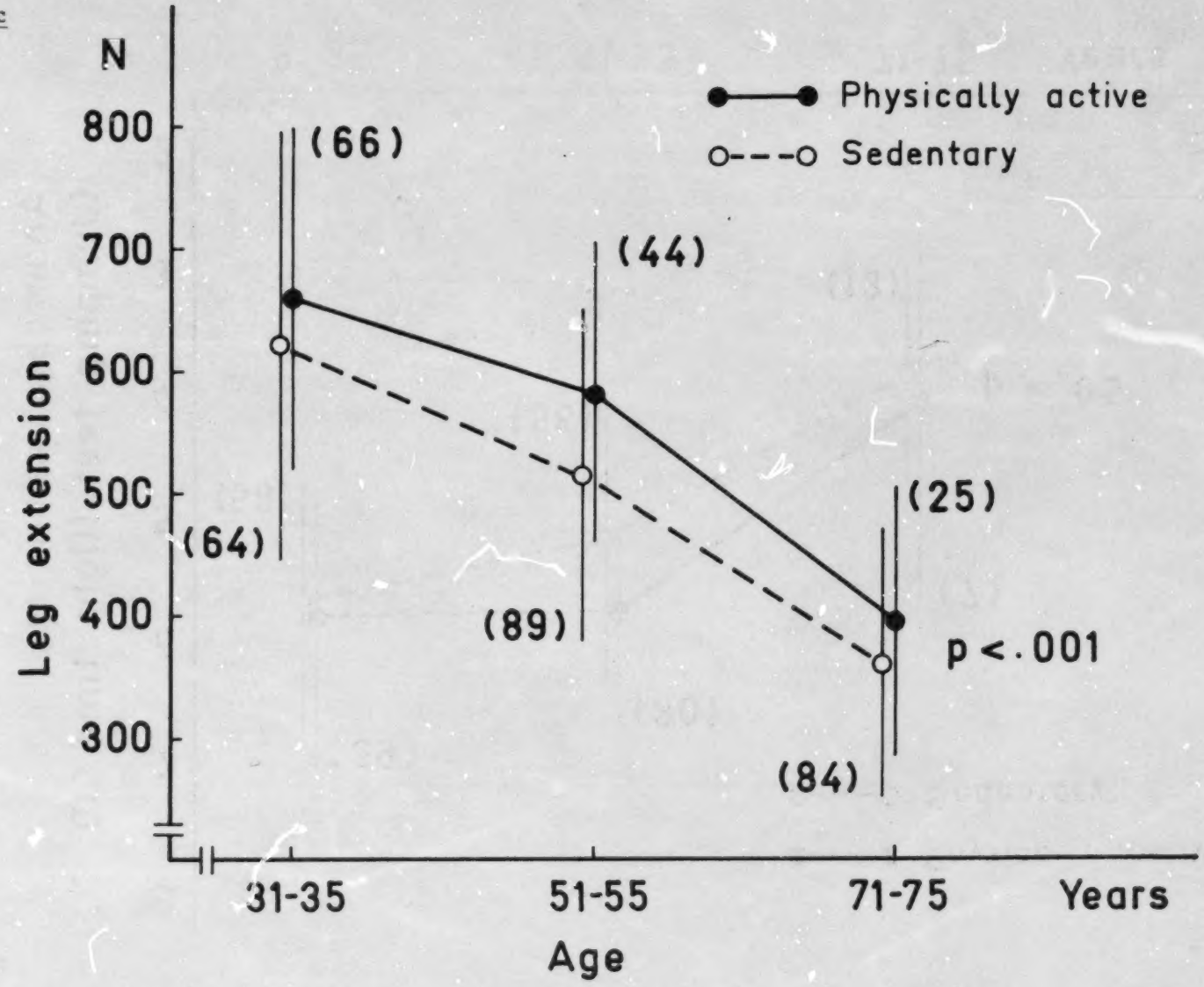

N
800
700
600
500
400
300
Leg extension
Physically active
Sedentary
(66)
(44)
(25)
(64)
(89)
(84)
p < .001
31-35
51-55
71-75
Years
Age

Figure 8 d

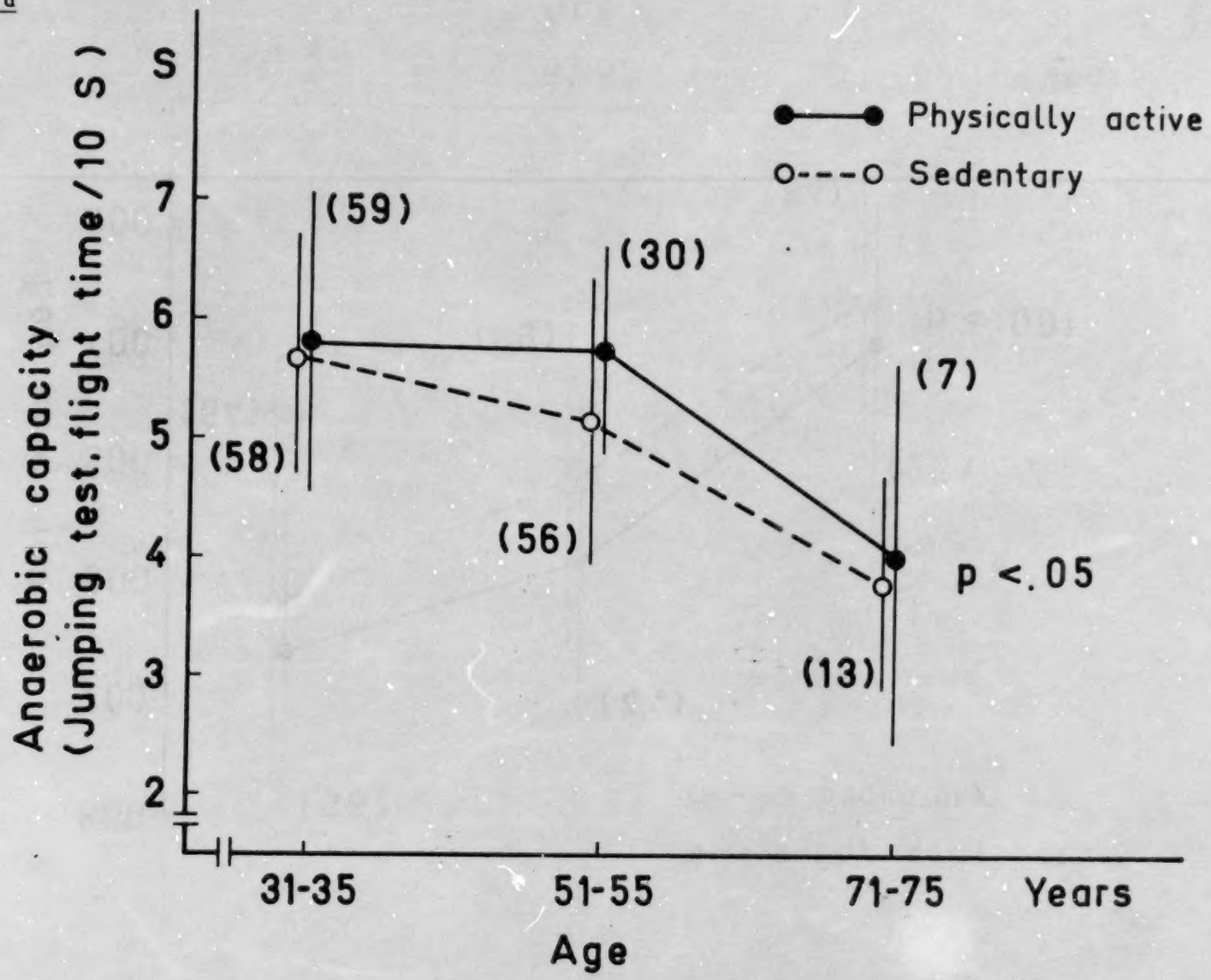

Physically active
Sedentary
Anaerobic capacity
(Jumping test, flight time/10 S)
S
7
6
5
4
3
2
(59)
(30)
(7)
(58)
(56)
(13)
p <.05
31-35
51-55
71-75
Years
Age

Figure 8 e

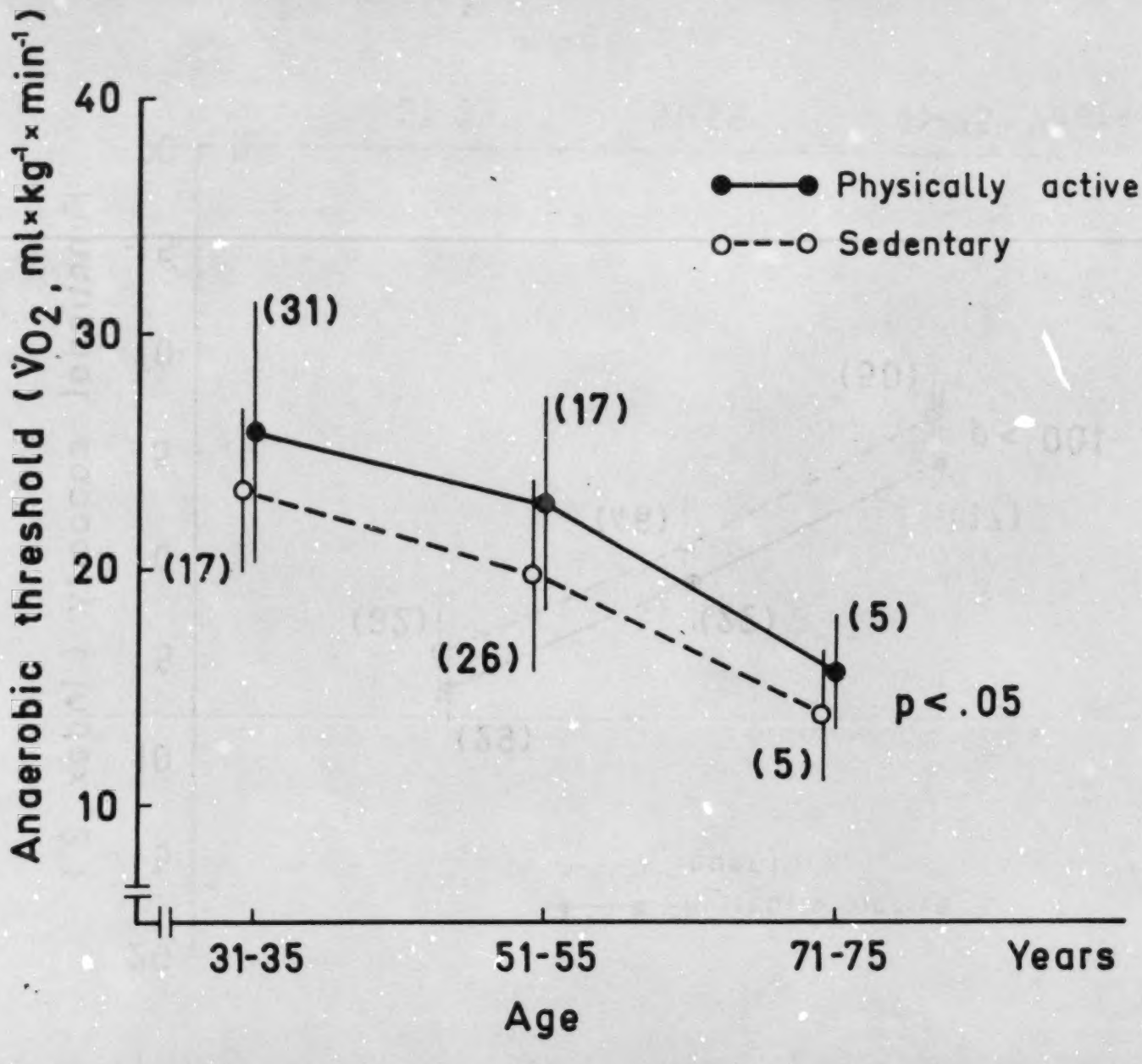
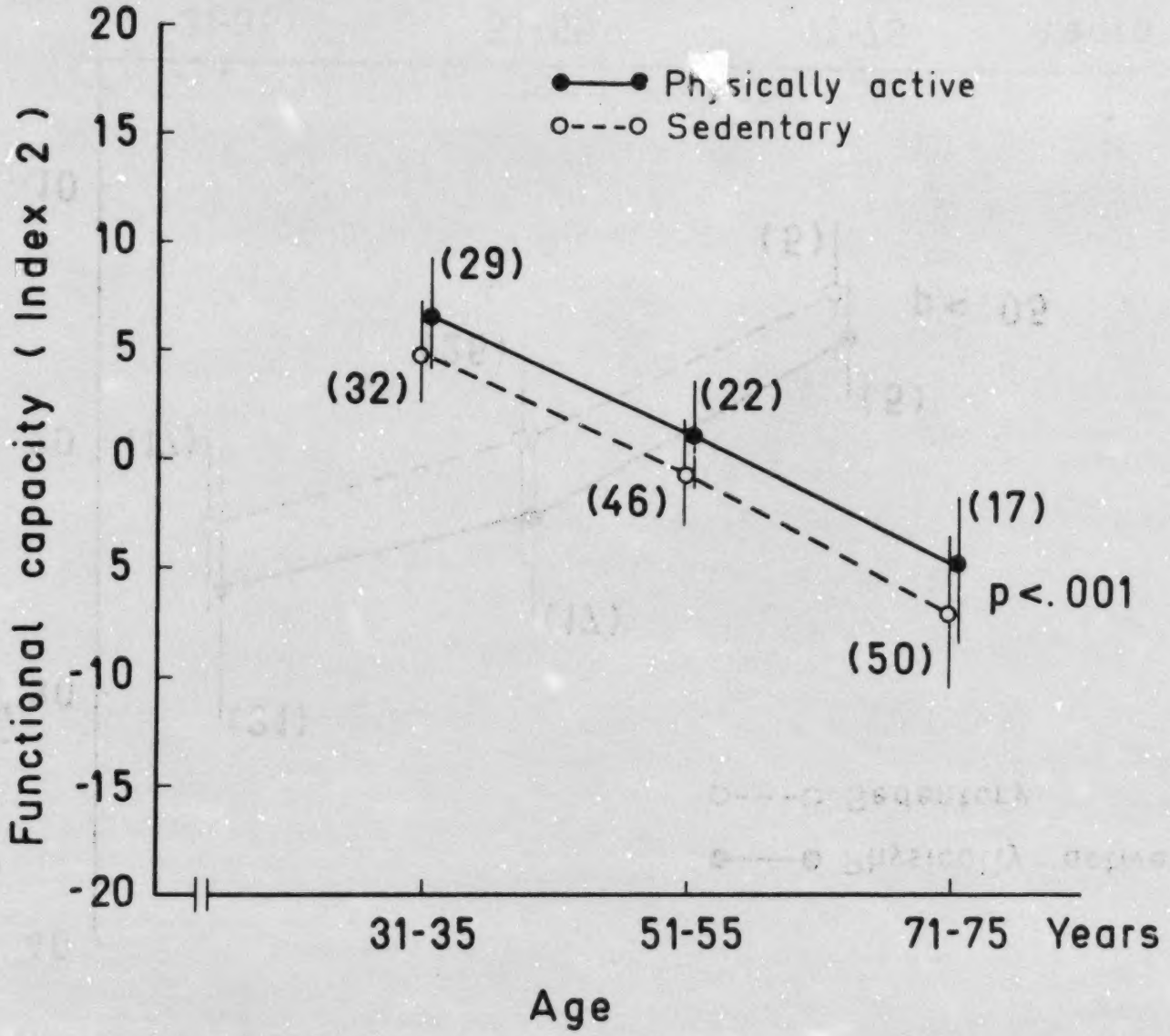

Anaerobic threshold ($\dot{V}O_2$, ml×kg⁻¹×min⁻¹)
40
30
20
10
Physically active
Sedentary
(31)
(17)
(17)
(26)
(5)
(5)
p<.05
31-35
51-55
71-75
Years
Age

Figure 8 f


Ph, sically active
o---o Sedentary
Functional capacity (Index 2)
20
15
10
5
0
5
-10
-15
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(29)
(32)
(22)
(46)
(17)
(50)
p<.001
31-35
51-55
71-75 Years
Age

SPORTING ACTIVITIES IN THE INDIVIDUAL LIFE FROM THE VIEW OF OLDER PERSONS

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OLDER PERSONS' NEED FOR SPORTING ACTIVITIES

For several years there has been an increasing scientific discussion on the possibilities and problems concerning sporting activities at an advanced age (KAPUSTIN, 1980; MEUSEL, 1982; MEUSEL et al., 1980; SINGER, 1981a). Doctors, psychologists and educationalists equally feel appealed to comment on these questions.

They turn to a field of research - up to now ignored and tabooed - which is of eminently practical importance; at least as the realisation of the aim of gerontology, ie "successful ageing" is concerned (LEHR, 1978).

The central psychological - mainly empirically orientated - way of looking puts the question for the needs underlying the sporting activities of the elderly. The available surveys are corresponding in the fact that older persons predominantly justify sporting activities for health reasons (cf. SINGER, 1981b). Less corresponding are the statements with regard to other motives (such as entertainment, change, contact, social gathering, pleasure to move) as results of very different weightings of the single needs (cf. KAUER-ADDOR, 1969; SCHMIDT, 1974; SCHULKE, 1977; NEUMANN, 1978; SIMAI et al., 1981), which have to be seen in correlation with the minor comparability of the groups and methods surveyed.

NEUMANN's survey (1968), which made a differentiation - undoubtedly necessary - of the group "older persons" according to the previous sport experiences, gives reasons to believe this assumption. Older persons are differentiated whether they have been in continuous sporting activities (athletes), whether they took up their sporting activities after a longer interruption (former athletes) or for the first time after school turned to sporting activities (non-athletes). The following group-specific differences result from the equal pre-eminence of health reasons for all groups of persons: the taking-up again or new start of sporting activities is greatly justified with the balance to job stress and the need to intersocial contact as the continuity of sporting activities, which has its preference in the pleasure to move - whatever is meant by that (NEUMANN, 1968, 11ff.).

In an own survey (ALLMER, 1982), in which older people were interviewed who were not employed any more and who did not start their sporting activities before advanced age (62-73) in organised sports groups, it was realised that the subjective conclusion of not (or no longer) tolerable physical and psychic changes show an essential prerequisite for the turn to sporting activities in advanced age. Such changes are mainly expressed in the experienced reduction of the physical well-being (reduction of physical agility, decreasing elasticity). Sporting activities are looked for to remove/to repair appearing physical deficiencies (compensatory function) and to prevent anticipated deficiencies in mobility (preventive function).

Perceived changes which make older persons begin with sporting activities can furthermore be found in the social field. Because of the previous obligations concerning both job and family a lot of contacts were possible, contacts which arranged the experience of membership and social integration and satisfied the need for companionship in an adequate way. Changes according to the profession or the family mostly cause a lot of contacts, which ought to be compensated by sporting activities.

Finally older persons name changes referring to their structuring of the day and week which had been guaranteed by the former activities. Giving up these activities means a loss of the structured course of time (cf. LEHR, 1974, 245) and momentary or lasting disorientation.

The turn to sporting activities is connected with the expectation to keep up the continuity (BERNDT, 1977, 414) so that preferably sports groups are chosen which are fixed in time and organised. "Sport as a rhythmic factor" (LEHR, 1978, 245) guarantees the time structuring and enables forward looking planning.

It can be assumed as a rule that sporting activities are not justified with a single need but are characterised by more needs. From a more formal standpoint the question is to ask which structure the single needs show according to their subjective significance (structural needs = Bedürfnisstruktur). Thus the structural needs can be characterised by one dominant need significantly superordinated to all other needs or by many more or less equally important needs. An empirically satisfying analysis of the structural needs of older people doing sport is still to come, as the surveys which have been carried out up to now concerning the older persons' sport motivation mainly limit to the recording of the needs. So the - practically relevant - assumption (still) remains untested, namely that sporting activities are particularly well founded as far as motivation is concerned, if they are characterised by a multitude of various and equally important needs. In this case it is possible to switch to other needs in order to reach a satisfying estimation of sporting activities. In this sense SCHMIDT's critique (1977, 194) with regard to the effectiveness of needs exclusively for health reasons is to be seen:

> "The appeal to the knowledge about health can only be successful in the longer term, if the sporting activities just for health arrange in any way feelings of success, status - and self affirmation for the individual and does not cause uncertainty and frustration".

THE STIMULUS FOR SPORTING ACTIVITIES FOR THE ELDERLY

From a motivational-psychological view there is a second important question: which significance is ascribed to sporting activities concerning the satisfactory needs of older persons. The following problem is aimed at: an older person, having lost his hitherto traditional possibilities of contact because of changes due to profession (eg retirement) can face the problem when needing company to find an activity which enables his satisfaction for need of company. If he can - among other activities - attribute this function to the sporting activities, he will easier turn to sporting activities than someone who - with the same social needs - does not see any possibilities of satisfaction in sporting activities, as the following statement shows:

"I'm lacking activity, sports practice, physical exercise, becoming tired. This I'm lacking more than social gathering, although I like that, too, and do appreciate it again and again. But this would not be the reason to go in for sports for I could have this, as well, in any other group (painting, pottery)".

There are - generally speaking - always connections between needs and ideas, how these needs are to be satisfied. Whoever wants to recover after hard work, for instance, can do so in various ways: he can run cross-country, read a book, take a warm bath or watch TV. To satisfy the needs he will choose the activity of which he expects positive effects or of which he has positive experience at hand. A person who does not attribute a recovering function to sporting activities - whatever reason might be - will avoid physical exercise and practice recreation by means of being inactive. The following statement is typical for this standpoint:

"I've never had the idea to practise sports. I was glad when I could rest." - "Then you are completely done and through with it.",

For one and the same need various but quite equivalent possibilities of satisfaction can exist for different persons - according to subjective evaluation as the stimulus of the various activities is perceived differently. Stimulus means the subjective view of the conditions to stimulate to an activity. A high stimulus means that the conditions for the activity are accepted as need stimulating and anticipated as need satisfying.

On the other hand, a low stimulus means unfavourable conditions to stimulate to a need and unsuitable possibilities to satisfy an existing need. Hence we can infer for the sporting activities that not practising sports does not necessarily signal a lacking need for moving, but other activities are chosen (like working in the garden or in the house) to satisfy one's needs. In this case a minor stimulus is attributed to sporting activities compared to other activities.

Which stimuli do older persons connect with sporting activities? To answer this question one can use qustionnaires of men and women (N=42) aged between 50 and 60 who are more than once a month physically active - according to their own statements. The questionnaire was developed in connection with a scale of BOETTICHER (1978) and contains the following stimuli (in brackets the respective statement is given in words):

1. Keeping fit (Practising sports keeps fit)

2. Self-Knowledge (Practising sports is a good possibility to get to know oneself

3. Development in personality (Practising sports influences the development in personality)

4. Improving capacity (One aim of practising sports is to improve one's capacity

5. Physical recovery (Practising sports is a good possibility to recover)

6. Finding contacts (Practising sports is a good possibility to build up social contacts)

7. Psychic recovery (Practising sports is a good possibility to work off accumulation and stress)

8. Structuring the day (Practising sports is a good possibility to structure a day's work).

On a 4-level scale agreement or refusal should be uttered insofar as the given stimuli for sporting activities are to the point with regard to one's own age (I agree completely, more, less, I don't agree).

Considering the profile of the stimuli of this age group one can determine (cf Illustration No. 1) that, as was expected, the stimulus "keeping fit" is in the highest position with all persons (97%). With a given need for well being, which is based on an increasing experience of reduced physical capability, an explicitly good - perhaps the only - possibility is seen in sporting activities to avoid or adjust the deficiencies anticipated or diagnosed with the age. This consciousness is, without any doubt, determined by the aims of the sports programmes for the elderly, in which keeping fit is formulated as a pre-eminent aim (cf MEUSEL 1982). Above all examinations in sports medicine are mentioned as reasons for the objective, suggesting positive results of sporting activities on the economising of the working method of the cardiocircular system and the functionality of the posture and the flexibility system (cf ROST 1981). The consciousness (sport serves to maintain physical health) can also be the result of one's own analysis of sporting activities which - according to the objective - is directed primarily on maintaining and increasing condition and fitness (cf DREISBACH 1983 a). Thus a particular satisfaction for the elderly comes with sporting activities - based on a personal survey - because the physical capacity has improved and the general mobility has increased. The survey by SIMAI et al (1981) in which the participants of a sportive training - directed on improvement of endurance - accordingly uttered an increasing physical well being, comes to corresponding findings.

The exclusively health-orientated sports programmes for the elderly will only stimulate those to do sports, however, who experience the satisfaction of the need of well being urgently. Consequently the health-oriented turning to sporting activities demands the consciousness of health care, ie health is not to be seen as a possession but as a task (NEUMANN 1978, 68). But the turning as well demands the admission to distinguish one's own health as "pressure of suffering" (Leidensdruck) - (Lehr, 1981, 103). Here one has to to take into account that a considerable percentage of older people tends to a health optimism, as the self-esteemed state of health turns out more favourably than the doctor's expert opinion (cf LEHR 1974, 277). So it is not surprising that older people cannot join in the health argumentation as a basis for sporting activities - not doing any sports in this case is a consequence being well understood ("Why should I do sport when I'm (still) feeling well!").

In comparison to the stimulus "keeping fit" older people agree in a significantly lower range to other stimuli (cf Illustration No. 1). In the field of sports fewer possibilities are to be seen to get to know each other better, to improve one's own capacities, to relax and to find contact with other people. Since there are experiences with sporting activities in old age among the persons asked one can conclude that obviously the practised sport for the elderly does not come up to those needs in an adequate way.

Provided that older people, for example, have the need for social contact, they will make the experience that the sporting activity - possibly opposite to their expectations - appears to be unsuitable for them to find social integration. The following utterance is typical for this view: "During the sports course there are hardly any possibilities to get to know each other. At best when we have a beer afterwards". But if needs like physical recovery, improving one's capacity, self-knowledge, finding contact are dominant, and if at the same time there is the conviction that sporting activity does not guarantee satisfactory needs, no immediate cause will exist for practising sporting activities, as other activities can offer possiblities just as well or better to satisfy one's needs.

From this the claim results in co-ordinating the objectives and so carrying out of the sport for the elderly offer, specifically to the individual needs. Without a sound analysis of needs, defining the objectives show pedagogical ideas rather than motivational binding for the individual. That does not mean that sporting activities should exclusively be conceived as an instrument of satisfaction of the individual's needs. With sporting activities for the elderly the chance should be taken equally not only to correspond to individual needs but also to create individual needs, even if this attempt "might not go off smoothly and trouble-free because of the solid, set needs and behaviours of older people" (DREISBACH 1983 b, 121).

It is necessary to know the stimuli for sporting activities for the elderly to fulfil on the one hand the expectations older people connect with sporting activities. So experiences of discontent can be avoided which make another - desirable - turning a problem or possibly lead to abandoning the chosen sporting activities, if the expected effects do not appear. On the other hand those stimuli are important which - in the case of given needs for sporting activities - prevent the older person from doing sport. If older persons do not expect, for example, a function to recover by sporting activities but an unnecessary waste of energy from the efforts produced, they will avoid practising sporting activities because of this conviction. So it is made clear that the stimuli for sporting activities which are cognitively represented as internal models have an action-regulating function: the individual needs can initiate or hinder sporting activities.

THE CHANGE IN STIMULUS FOR SPORTING ACTIVITIES IN OLD AGE

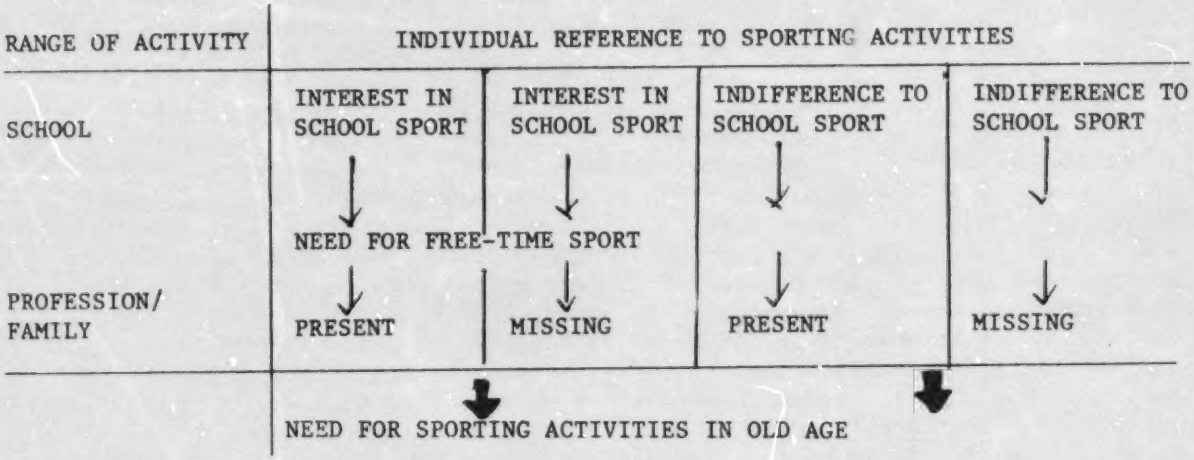
If older people avoid sporting activities, because the internal model, for example, includes the conviction that sporting activities are not an adequate means to satisfy the recovery needs or social needs, so is, in fact, a reason given for not doing sport, the developing conditions which led to shaping this interral model remain unexplained, however. The following analysis of the stimuli of different age groups shows a first step into this direction. With this action information can be gained about the assumption, if the estimation of the stimuli for sporting activities changes with the age. It has to be mentioned that changes established in such a way do not mean explanations in the field of developmental psychology in the narrow sense, as only the products of a developmental period and not their conditions of origin can be made clear.

For the analysis of the changes in stimuli two other age groups were chosen by way of comparison. Men and women between 30-39 years (N=37) and 40-49 years (N=30) were investigated. Those groups which also favourably

estimated themselves as sporting active (more than once a month) were given the list with the stimuli for sporting activities which had to be answered referring to their own age.

The comparison of the stimulus-profiles of the two groups with the stimulus profile of the older ones (50-60) shows a striking difference (cf Illustration 1): the stimulus profile of the group 30-39 can be marked by various stimuli of more or less equal status, whereas the stimulus "keeping fit" is typical for the profiles of the two other age groups to which the other stimuli are significantly subordinated. As a result there are structural differences in the profile of the stimuli. With growing age a delimination of the originally varied stimuli for sporting activities takes place. Whereas the younger age group seems to see sporting activities adequately suitable to satisfy various needs as keeping fit, self-knowledge, improving capacity, physical and psychic recover, older people (40-49, 50-60) predominantly take sporting activities as a good possibility to keep fit.

Illustration No. 1: Agreement (%) to stimuli for sporting activities



Such a delimitation can mean that with growing age "the care for health" (LEHR 1981, 103) is the essential purpose in life. Experience in physical and psychic drop in performance and capacity as well as the idea of forthcoming physical damage makes coping with experienced and anticipated changes a matter of priority. The necessity to be active lies in the fact that, in the case of doing nothing, a non-tolerable decline of the psycho-physical general situation is to be feared. The delimitation can also mean, however, that - as was said before - the health-orientated sport programmes for the elderly do not (longer) allow the satisfaction of other needs or that sporting activities in old age are principally valued inappropriate to satisfy certain needs. So the conviction - possibly mediated by society - that in old age "position at rest" and "conserving one's own strength" should be the highest principles can lead to a view different from the originally supposed function to recover (cf LEHR 1974, 281). These changes can be interpreted as an adjustment to the expectations of the social environment, which causes a narrowing of the individual possibilities.

Two further significant statements - also statistically seen - are to be emphasised. The first remarkable statement is that older people estimate the function of developing one's personality clearly inferior compared to the two other age groups (cf. Illustration 1).

This different view of the stimulus' development in personality can be interpreted as a hint to a changing conception of development. With growing age the conviction seems to develop more and more that certain psychic features are no longer changeable, since the development is regarded as completed. Changes in personality are not believed - neither by means of sporting activities. Regarding this aspect the estimation of stimuli can be taken as an indicator for controlling convictions, which are to be marked as expectations according to variance/invariance of psychic features (cf THOMAE 1981, 133).

The second remarkable statement is that with growing age sporting activities are perceived as a good possiblity to structure the day. Obviously the insignificant agreement of the age group 30-39 means that as a result of the professional and familiar obligations a structuring of the day is not necessary. The problem of this age group is rather to integrate the sporting activities in the course of the day, as "lack of time" is quoted as an essential obstacle against sporting activities. The problem to structure the day and the search for appropriate possibilities is only urgent, if the systematically arranged course of the day is endangered or lost because of professional or familiar changes.

SPORTING ACTIVITIES IN OLDER PERSONS' REMINISCENCES

The objective "to be sportslike active for a lifetime" is especially formulated by sport educationalists. The supporters of this objective are confronted with a reality, however, which obviously stands in glaring contradiction to their expectations:

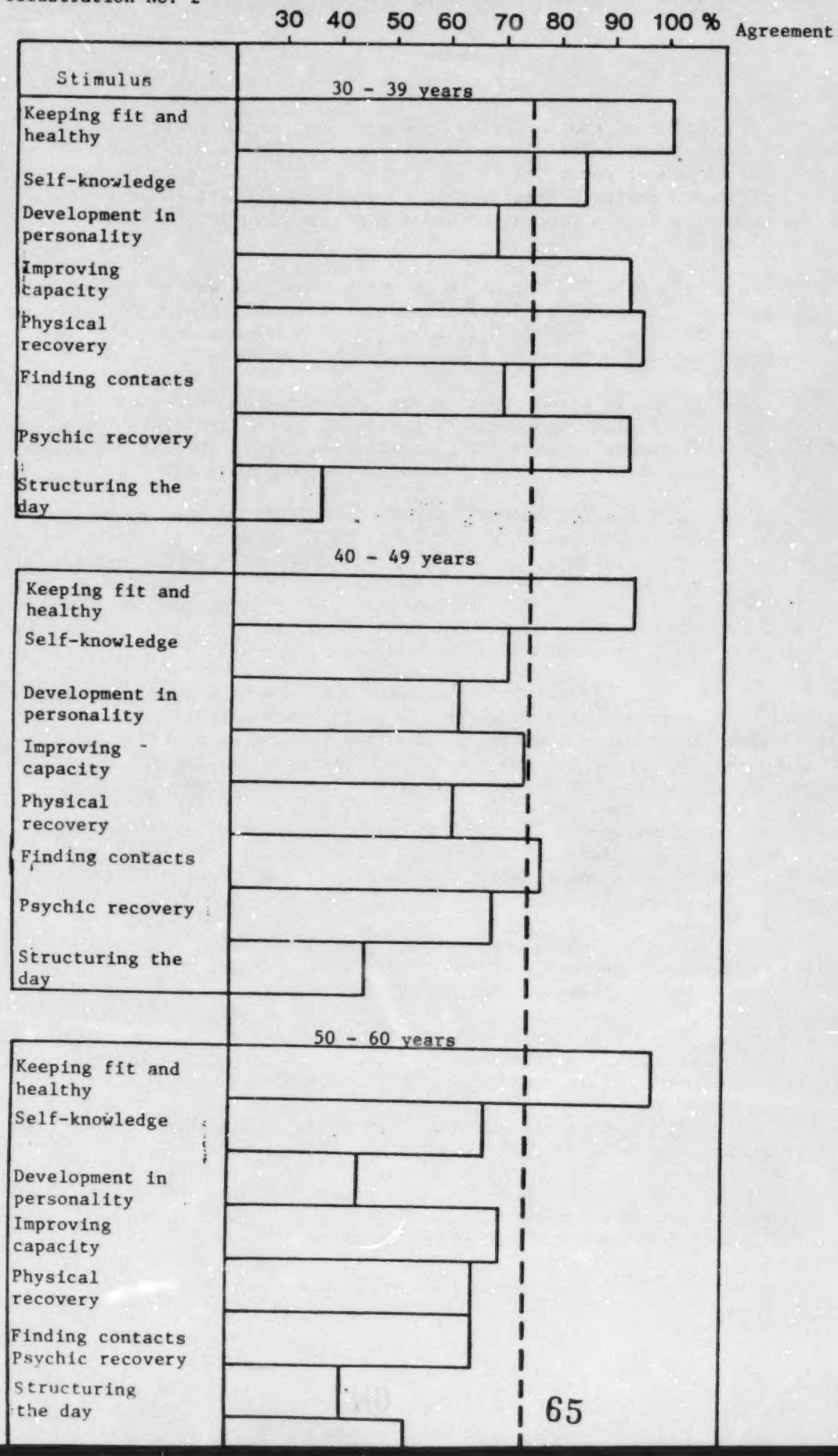
> "After experiences with moving - and active games and sport in kindergarten and at school, maybe in clubs, the biggest part of the youth loses contact, the inner relationship to active sport. Even competitors end their career around 30 and do not find - for the moment - the way to a suitable free-time sport. It often happens that the pleasant sides of sport are only rediscovered after centuries." (KAPUSTIN 1982, 26).

This - sobering - statement evokes the question, where the reasons are for the missing motivation for doing sport for a lifetime. At present a satisfying analysis of reasons - empirically justified - is not available. First hints are to be taken from the ZIMMER Survey (1983), in which adults are questioned about their reminiscences concerning school sport. The fact that 40% have more negative reminiscences about school sport does not allow the conclusion that the motivation for doing sport for a lifetime had been left out in school sport, since neither the age nor the present or past sporting activities of those asked had been raised. The knowledge about - empirically gained - explanations, however, is a conditio sine qua non for the use of measures, which shall cause the individual to do sports. Therefore the effectivity of measures not (yet) proved is not urgent. So - for example - the advised improvement in the sport offer (KAPUSTIN 1982, 26) shows a conceivable possibility to achieve a continuing sporting activity after school days - the expected effect does not necessarily have to take place - as will be shown later.

To receive even more specific information on questions to be answered detailed interviews (N=25) were made with older persons (60-80 years old) practising sporting activities in their old age. The interview concentrated on the needs which underlie sporting activities in old age, the interest in sport during school days and the sporting free time activities during the professional and the familiar obligations.

Two different aspects of sporting activities are analysed with this method. On the one hand the individual relationship to obligatory sport at school is analysed, which sets relatively regular sporting demands for the individual. It is questionable how in the field of activity school sport was done (interest in school sport). On the other hand the individual relationship to voluntary free time sport after school days is investigated. As after school days sporting activities are no longer obligatory, but the field of activity profession/family is experienced as obligatory, one has to ask to which degree the need was existing to do free time sport (need for free time sport).

Illustration No. 2



The evaluation of the interviews reveals that in the field of activity school the individual relationship to sporting activities can be marked as an interest in school sport (cf Illustration No. 2). The interest in school sport expressed a positive relationship to sporting activities at school which obviously results from a feeling of success as is shown in the following interview examples:

> "I really liked PE." "For me PE was number one, it was my favourite subject." "The other subjects I considered as obligatory and only did the essentials, mostly I liked being sporting active." "I liked to do gymnastics very much, I was among the top three."

The disinterest in school sport means that physical education was experienced as obligatory and the taking part in it was indifferent. This individual relationship to sporting activities at school, predominantly based on failures and flops, is expressed in the following interview statements:

> "I didn't have any attitude to sports, I couldn't do any sports." Even today I have an unpleasant reminiscence of PE in school." "I've never made it in PE, I didn't like it." "Well, sport at school, this was part of life, we joined in, but not in the first place." "I can remember that I was afraid of sport. It came last for me." "Gymnastics at school didn't mean anything to me". "PE was not very attractive". "I was not enthusiastic about sport. I have always considered it as compulsory".

The thesis that interest in school sport shows a favourable assumption for voluntary sporting activities after school days and that disinterest in sport hinders sporting activities in the free time is only partl, supported by the interviews available. We can derive from Illustration No. 2 that interest in school sport does not necessarily involve the need to be sporting active in the free time, and disinterest in school sport does not exclude a need for free time sport. A need for free time sport after school days can rather be missing despite interest in school sport, and a need for free time sport can be existing although the interest in sporting activities at school was relatively low.

First of all the reasons shall be analysed which help to explain the correlation between interest in school sport and a lacking need for sport in free time. On the basis of the interviews two possible explanations would provide a solution. First, there is no internal necessity to be sporting active by oneself in free time. This includes reasons like doing sport is limited to school sport, professional activities offer sufficient possibilities to move and no perceptible organic hardship. Examples from the interviews are:

> "After school nothing was going on, there was no question like this, then came the next phase in one's life, I had to deal with my family." "That was school sport, and so it was settled." "After school there was no sport any more. No one had the idea, nobody was interested in it." "I was no longer aware of sport, so as to say I had to look for something, I really didn't look for anything like that." "First I worked with the wine-growers, there I had enough sport when we went up and down in the vineyards." "We worked in agriculture, there was no time for doing sport."

"When you are young, when you don't even realise you've got organs then there is no use for doing sport."

Secondly there was no external stimulus given for sporting activities. Social barriers, a lacking sport offer and a missing motivation by others are important reasons which were opposite to sporting activities after school days. These facts are clearly shown within the following examples from the interviews:

"Formerly it was not as modern as today that a woman does sport, this has only developed in the last years. Then the woman had to be at home, do the work, and that was it." "When I see my children, they can take more time for such things. No, we couldn't do that, ie say, 'I'm going out tonight, or I simply do that now'." "We had no possibility, it had to be made more popular." "Nothing did exist like that, I hadn't seen anything of sport; otherwise I would have joined in it. But then nobody talked about that. There was nothing like the squash centre today." "At school I did a lot of swimming, but afterwards it tailed off. There was no offer." "I didn't meet anybody who asked to join in, which I'd have done for granted." "If there was a group or if you grew into that just from school and there existed possibilities in companies too, or there were a sport group nearby, then there would be better possibilities and the husband or wife would go along with it."

Both explanations were also given by older persons, who had taken part in school sport with little interest and had no needs for doing sport after school days (cf Illustration 2). Moreover the argument "lack of time" is brought to bear by this group. Because of professional and familiar obligations there was no freedom for sporting activities. According to the saying "Where there is a will, there is a way" we cannot interpret this argument as an obstacle, which stands in the way of the need for sporting activities, but can understand it as a technique of justification for a lacking need for free time sport. This view is shown in several interviews:

"Well, there was no time. You have to get up early in the morning, and in the evening you don't feel like it. If I had really wanted to, I would have had time for it." "I've always thought you have to take your time, but when it got down to it, anything else was interposed, of course, as, for instance, 'I don't feel well today, I can do it tomorrow'." "I think it is not a problem of time but one of consciousness."

This interpretation can be favoured insofar as lack of time is not mentioned by older people with the need for free time sport, even if they could not satisfy their need for sporting activities in a suitable way. For this group the conflict between the need for free time sport and the preoccupation with both professional and familiar obligations is more typical. How to solve this conflict? The individual attempts for a solution as reported in the interviews can be grouped in two techniques of mastering: the mastering by new structuring and repression. New structure means the change in importance of the sporting activities in the individual's activity profile. The binding demands in profession and family do not allow regular sporting activities so that the sporting activities, compared to the hitherto led life, have to recede into the background or are reduced onto a limited time span (holidays), in which they are assigned a particular predominance. By means of such new structures it is possible - even if not in a satisfying way - to continue being sporting active, as abandonment to sporting activities does not come into consideration.

"Once a week is not enough, it ought to be more, actually, but music is more important to me. Sport does begin, when I go on holidays again, then I have no music with me, then sport will be intensified again." "I would have liked to do more sport, my attitude to sport has always been positive. But it always varies which is more urgent, to attend lectures and study or to be able to do sport. You can't do all at one time, one thing has always to recede somehow."

When using the technique of mastering repression, the need for satisfaction is set aside, since sporting activities and the demands in the field of activity profession/family are experienced as incompatible. The need for sporting activities is so long repressed until there are more favourable possiblities. Solving the conflict can be seen in abandoning the need for satisfaction for a certain time and in recovering at a later stage:

"The desire for sport was postponed by too many different things." "I've always had the wish to do sport, but it was simply impossible." "The demand for performance shifted, when the independence in profession was achieved. Then this demand for performance shifted to the sporting sphere." "When the children were grown up, I could pursue these things more than I'd done before." "That would have attracted me a lot, but the day was completely filled. Now, as I'm alone, it thrills me again." "Even earlier I've deeply wished to do gymnastics. Now I have a postponed demand, and I've really started dancing with the age of 70.".

New structure and repression do not mean a contenting need for satisfaction, as sporting activities cannot be realised in the desired way. Thus good conditional clauses are given for sporting activities in old age, since older persons can revert to activities which they only could pursue unsatisfactorily in the past. With these "possibilities to revert" the problem of new orientation, which is quite frequent among the elderly, does not come into account, as free time activities do not have to be structured in quality but in quantity - reverted activities are taken up, others, which and been neglected before, intensified.

The analysis of the need for sporting activities <u>according to the vita</u> clearly shows that the need for sporting activities in old age is based on a different <u>biogenesis</u> (cf Illustration No. 2). The attention to sporting activities in old age is therefore only to be understood, if the occurred change is interpreted with regard to the hitherto sporting development. Undoubtedly there is a difference, if one pursues a need, for a long time repressed, or if - after a long disinterest in school and free time sport - a need for sporting activities comes into existence (only) in old age. With this different attentive motivation various expectations and stimuli go along with the sporting activities whose knowledge is a precondition for a satisfying sport offer. We have to draw the conclusion for the attempts to motivate older non-sportsmen/women for sporting activities that the measures for motivation have to be planned with regard to the hitherto development.

The result of the present survey is of principal importance, namely that being sporting inactive cannot be equated - as this is often done by mistake - with a lacking need for sporting activities in the free time. An existing need for free time sport is not visual, when this is confronted with realisation problems because of the compulsory field of activity profession/family. In such a case special planning has to be made, how acceptable possibilities for satisfaction can be created. General appeals to the necessity for sporting activities or the improvement of the sport offer do not serve as effective measures from this point of view. Frequently the problem how to integrate sporting activities in the normal course of the day are reported by the persons interviewed:

> "It has clearly come to my mind, how well I feel afterwards, but how to integrate this into everyday routine." "The whole problem is, as I see it, that I can't build it into my daily structure. It should belong to the daily routine like washing or tooth-brushing, otherwise it doesn't work." "Sport is regarded as free time organisation, which you can do without every now and then." "In the morning it is so hard to get up earlier, and in the evening, when you come home, you get tired, and then you don't manage to pack your swim suit and go for it.".

So the question is to be put, if sporting activities shall only be done in free time, thus in addition to the normal course of the day, or if sporting activities are prefereably to integrate in the course of the day. It is an advantage not to underestimate that with sporting activities understood in this way (eg little walks, going to work by bicycle, avoiding the use of the comfortable lift) the feeling does not grow to have to do something additional - as an imposition - but to be able to do something as a matter of course, as belonging to everyday routine. For the future this means that there have to be organised not only expensive enlightenment campaigns, but - from the view of developing psychology - also the topics which had been treated carelessly in the past have to be recovered, and the development of our consciousness for being mobile has to be forced as an educational task.

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REASONS WHY DECISION-MAKERS SHOULD URGE OLD PEOPLE TO PRACTISE PHYSICAL AND SPORTING ACTIVITIES

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Old people for a growing proportion of the total population. In France the "65 and over" group now accounts for 14% of the population, as against 5.6% in 1800 and 8.5% in 1901. It has increased in number with the drop in the death rate and in percentage terms with the drop in the birth rate. This trend is known as the "ageing of the population". France had the oldest population until about 1950, but has now fallen behind other countries such as the Federal Republic of Germany and the United Kingdom, not because the ageing process has come to a halt in France, but because it has on average speeded up in the countries of the European Economic Community.

In addition, the number of very old people has mushroomed: in France the "85 and over" group has almost tripled in 30 years and will have increased more than fourfold in 50 years. The very old, while not dependent, are more fragile, since age makes it increasingly difficult for them to retain their autonomy. Despite government efforts to improve old people's resources and living conditions, much remains to be done to reduce inequalities and offer decent living standards to the most under-privileged.

Though they share many problems with the rest of the community, old people have a number of specific needs in terms of health, nutrition, housing, environment, income security, employment and education. All efforts to improve the quality of their lives and fulfil their social and cultural needs give them a better chance of continuing to perform their role in society.

It must be realised very soon that coping with the problem of ageing is no longer simply a matter of applying measures to improve protection and assistance: it is imperative that old people should play their full part in the life of the community and be considered as essential elements of the development process at all levels. Ultimately, in fact, old people themselves, aware of the pressure they can exert on decision-makers, may be the ones to force society into adopting an active view of ageing as an opportunity to pursue one's personal fulfilment.

According to J Dumazedier, free time is not first and foremost a product of consumer society, but a product of advances in work, technology and workers' struggles. In this sense it means not only a reduction in working hours, but also the acquisition of a "social" time endowed with contagious new properties. This "freed" time is claimed by all age groups and reflects a widespread desire to assert a new form of human dignity away from traditional means of production. In campaigns for the right to free time, old people are often in a better position than others to develop an existence which is creative for its own sake: "life, not survival!".

Retirement must be a time for leisure activities geared to self-fulfilment as an end in itself. Leisure means freedom from institutional obligations of a particular kind, although like all social phenomena it is shaped by society. It must be the outcome of a free choice and is consequently hedonistic in character, for if it does not procure pleasure it loses much of its attraction and value. Lastly, it offers people a chance to outdo themselves without constraint and helps to free creative energy conducive to

social communication between generations. In this sense physical activities and sport are an essential part of leisure, just as much as artistic, intellectual and social activities. They generate a new lifestyle and can therefore establish behavioural patterns which give fresh purpose to people's lives and facilitate the achievement of ambitions which have sometimes been stifled by the pressures of working life.

Human beings are designed for action. The technological revolution of the past few decades has drastically changed our mode of life, steadily reducing people's physical participation in the performance of their domestic and occupational tasks, which have been taken over by machines. The upshot is a new world with radically different surroundings and living conditions from those of our ancestors. Today's generation of pensioners understandably has some difficulty in adjusting to a constantly changing world which differs so much from the one it used to know.

While people have on the whole benefited from the change, insofar as it has brought them greater affluence and well-being, it may well be instrumental in sending them unawares to their doom unless they awaken to the dangers ahead. When human beings become inactive, their physical condition gradually deteriorates and their health is jeopardised. They are liable to suffer from malnutrition, fatigue, cardiovascular diseases and a reduction in immunity. They become more sensitive to stress and are less well equipped to withstand its effects. Their psychological make-up changes and their intellectual faculties become blunted. This is because motor and psychological functions are closely interlinked and any disruption of the one inevitably affects the other. Physical inactivity leads to mental inactivity and vice-versa, condemning the person concerned to a slow process of generalised, irreversible degeneration.

Discussing ways to prevent ageing is meaningless, since it must be viewed as a natural process which continues throughout human life. What can reasonably be hoped for, however, is a general preventive policy under which preparation for retirement will no longer be equated with last-minute adjustment. People have realised the need to retain their independence as a result of the increase in life expectancy. Physical activities and sport are undoubtedly the healthiest, cheapest and most natural therapy and the most effective remedy for dealing with the pressures of modern life. It integrated into a reasonably healthy lifestyle, they should enable individual people to take their advancing age into their own hands and manage it in their own best interests.

Recent neurobiological research has shown that proper maintenance of cortical activity can preserve a person's ability to adjust and engage in educational activities up to a very old age. One can learn at any age. A new science, educational gerontology, in fact sets out to study the specific characteristics of older learners' training situations and behavioural patterns in order to identify the features common to all learning situations and place the age factor in its proper perspective when it comes to differentiating between target groups for adult education.

Apart from universities, which cater for a very small proportion of old people, experiments in physical self-expression and artistic creation have been carried out in institutions with semi-dependent people suffering from intellectual and communicative handicaps. They have demonstrated how, in an environment more conducive to rehabilitation work, encouraging people to move and express themselves freely can do much to alter their behaviour and help many of them retrieve a part of their identity.

Clearly, physical recreational activities should henceforth be viewed as part of a gerontological approach-based on education and sports and aimed at a multi-dimensional study of ageing among both old old people, younger sports-people and high-level athletes.

Decision-makers can already be asked to consider a number of proposals, especially on the training of technical staff and group leaders. Training programmes must replace the term "old age" with that of "advanced age", and in the near future, research carried out as part of a broader approach to adult education must bring people of different generations closer together and give them a better chance of managing their own old age.

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Two events, one of international significance, the other national, have recently emphasised the interest which governments take in all the problems relating to aging and, in particular the conditions in which the elderly live. The first was the World Assembly on Aging, held in Vienna from 26 July to 6 August 1982 at the initiative of the United Nations (UN); the second was France's first National Conference of the Retired and Elderly, held from 28 March to 1 April 1983 at the initiative of Secretariat of State for the Elderly, which is attached to the Ministry of Social Affairs and National Solidarity.

The states represented at the World Assembly on Aging, aware that the proportion of older people in the population is increasing and that the problems of population aging and national development are closely linked, agreed to "launch an international action programme aimed at guaranteeing economic and social security to older persons, as well as opportunities to contribute to national development".

The International Plan of Action on Ageing accordingly set itself the following objectives:

- To further national and international understanding of the economic, social and cultural implications for the processes of development of the aging of the population;

- To promote national and international understanding of the humanitarian and developmental issues related to aging;

- To propose and stimulate action-oriented policies and programmes aimed at guaranteeing social and economic security for the elderly, as well as providing opportunities for them to contribute to, and share in the benefits of, development;

- To present policy alternatives and options consistent with national values and goals and with internationally recognised principles with regard to the aging of the population and the needs of the elderly; and

- To encourage the development of appropriate education, training and research to respond to the aging of the world's population and to foster an international exchange of skills and knowledge in this area.

A number of recommendations were made concerning the measures to be taken in the fields of health and nutrition, protection of elderly consumers, housing and the environment, the family, social welfare, income security and employment, and education.

In the section on health we should note in particular Recommendations 2 and 14, which refer to physical exercise as a means of remaining in good health throughout life. It is pointed out that "research and practical experience have demonstrated that health maintenance in the elderly is possible and that diseases do not need to be essential components of aging".

In the section on education, however, Recommendation 48, which is concerned with ways of encouraging greater participation by the elderly in leisure activities and the creative use of free time, considers only the utilitarian aspect of physical activity, ie easier access to cultural institutions such as museums, theatres, concert halls and cinemas. It is regrettable that no mention is made of physical activity and sport as subjects of courses that could be organised for the retired in cultural centres in the same way as courses on art, choral singing or music. Nevertheless, we should note the UN's concern for "the inclusion of aging in curricula, as an aspect of normal development and education for the life of individuals beginning with the youngest age; so leading to greater knowledge of the subject and to possible positive change in the stereotypical attitudes to aging of present generations".

Lastly, a set of strategic conditions necessary for the plan's implementation at national level was defined: data collection and analysis, training and education, and fundamental and applied research in the biological, psychological and social fields.

The purpose of the National Conference of the Retired and the Elderly was to give these sections of the population a say in the choices which, as part of the IXth Plan, will govern their everyday lives. The following were involved in the conference and its organisation at the local, departmental and regional levels: the public authorities, their elected officials, their heads of social policy and their social workers, and the entire range of community-based associations (associations concerned with the environment, cultural development and leisure, parent-teacher associations, etc). Associations, organisations and other groups for the retired and the elderly were also represented at this forum open to all generations, as indeed were all sections of society.

Twelve themes served as a basis for the discussions and suggestions of the committee appointed to establish the priorities which were to be submitted to the President of the Republic and the Government for inclusion in the preparatory work on the plan:

1. The transition to retirement and resources.

2. Solidarity between age-groups, relations between generations.

3. Training.

4. Research.

5. Everyday life, population, housing, environment, consumer affairs.

6. Free time, innovation, leisure activities, creativity, associations.

7. Representation and participation, relations with government departments.

8. Day-to-day security.

9. Information and communication.

10. International aspects.

11. Preventive measures in respect of aging and preservation of independence.

12. Loss of independence.

Participation in physical activity and sport was often referred to during the conference, especially in the following committees:

1. The transition to retirement and resources: "physical" preparation for retirement.

2. Solidarity between age-groups, relations between generations:

   - membership of cultural, social or sports associations.

   - ability to remain in maximum physical condition, bearing in mind one's real capabilities.

3. Training:

   - consideration by gerontologists of certain academic disciplines, such as education science, including the techniques of physical activity and sport.

   - action by the Ministry of Free Time, Youth Affairs and Sport to provide the retired and the elderly with easier access to permanent education.

6. Free Time, innovation, leisure activities, creativity, associations:

- request for information about keep-fit activities and staff training programmes in that field.

- use of the media to facilitate the dissemination of information.

- publication of keep-fit material.

- organisation of keep-fit courses for the retired by supplementary pension funds.

11. Preventive measures in respect of aging and preservation of independence:

- development of a real policy on physical education and sport throughout the education system.

- access for the retired and the elderly to sports facilities.

It should be noted that, of all the research topics suggested by Committee 4, not one concerns the effects of physical activity and sport on aging and that Committee 12 confined its discussion of physical activity in the institutional environment to the specific techniques of functional rehabilitation and so-called occupational activities.

In view of the large number of retired persons present and their knowledge of the problems raised, especially in rural areas, by the dissemination of information and the setting up of associations to encourage older persons to take part in physical activities and sport, it was possible to assess the importance of the proposals made in this field by the interested parties themselves. There was a clear consensus, which the highest state authorities will have to take into account in planning for the next decade. All that remains is to translate this set of high-minded proposals into action - a tall order in a period of economic crisis.

There is no doubt, however, that the retired and the elderly, aware of the pressure they can exert on those who govern them, will show sufficient vigilance and determination to ensure that their suggestions and demands do not remain a dead letter. By embarking resolutely on the course opened to them at the conference, they intend not only to defend their own cause but also to pave the way for future generations of retired persons, thus making their contribution to national solidarity.

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PHYSICAL ACTIVITIES FOR THE ELDERLY

Survey among the French-speaking community of Belgium

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In 1970, 14% of the population of the developed world was over 60. By the year 2000 this group will have swelled to 16%. Aging of the population compounded by a declining birth rate is the lot of industrial societies. In the 19th century Belgium already had the second highest figures for aging of the population.

The numbers of old people has doubled in Belgium in the last 50 years. 18% of the population of Brussels was over 65 in 1979. The figures for Wallonia and Flanders were then 14% and 13%, respectively. In 1981, the population aged 60 and over accounted for 18.06% of the total, while those aged 65 and over accounted for 14.3%. The elderly are now putting a serious strain on sickness and invalidity insurance funds: 60% to 70% of patients are old people.

Old people are not a uniform social group, although they are often lumped together under the same heading: "the retired". The socio-economic-cultural and health differences, although obvious, are worth mentioning. All these factors will determine attitudes to the social phonemenon of old age. Differences can also be seen with regard to the sex distribution of old people. Women, who often retire earlier than men, have a greater average life expectancy than men. In 1981, the Belgian population aged 65 and over was made up of 39.9% men and 60.1% women.

In the face of this huge sociological problem, the ADEPS (government department responsible for physical education, sport and outdoor activity) could not remain indifferent to the problem of physical activity for the elderly. In order to form the clearest possible picture of the work being done in the field, this body carried out a survey in which it questioned:

1. Sports federations,
2. Local authorities,
3. A group of old people chosen at random in Brussels,
4. Various institutions in the permanent education field.

The report which follows is a summary of the results of this survey.

1. SURVEY OF SPORTS FEDERATIONS

ADEPS asked sports federations the following questions:

1. What percentage of your federation's members is over 60 years of age?
2. Does your federation organise special competitions for these people (championships, tournaments etc for veterans, senior citizens etc)?

3. As far as you know, are the people in your federation's "veterans" category long-standing members who have kept up their physical activities, or are they newcomers?

   Can you give a percentage for the new members of your federation who are over 60 years of age?

4. Do you require your members over 60 years of age to undergo a medical examination? If so, is this medical examination different from that which your younger members are required to undergo?

5. Does your federation organise or take part in international meetings for old people? If so, please give details.

Answers were received from 48 out of the 82 recognised federations, ie 58.53%, as well as from four non-recognised federations: the Belgian Royal Union of Association Football Clubs, the Belgian Royal Hockey Association, the Belgian Royal Federation of Basketball Clubs and the Belgian Cycling League. The recognised federations are those which are subsidised. They cover a very wide range of all the physical activities and sports available in the French-speaking region. Obviously, some of the activities offered cannot be practised by old people. Sixteen sports federations answered the entire questionnaire in the negative. Their activities are largely inaccessible to people aged 60 and over. The sports in question are wrestling, karate, martial arts, judo, French boxing, fencing, motor-cycling, potholing, handball, football, volleyball, rugby, hockey etc.

1. The percentage of members aged 60 and over varies greatly from one federation to another, ie according to the activities practised. It ranges from 0.65% to 22%; in most cases, 1% to 2% of members are over 60. One federation, the Pétanque and Provençal Games Federation of French-speaking Belgium, reports that 40% of its members are 60 and over. The sports and outdoor activities than appeal most to old people are athletics, gymnastics, swimming, walking and orienteering, figure skating, equestrian sports, fishing, tennis, shooting, land-yachting, camping and caravaning, and crossbow.

2. The great majority of federations do not organise special competitions for the over-60s; some, however, allow people of all ages to participate. In athletics, gymnastics, tennis, table-tennis, swimming, shooting and water-skiing, age categories are established for competitions. For example. in athletics, categories begin at 40 years of age (40-45, 46-50, ... 60 and over). The same applies to swimming, cycling and some other sports.

3. The great majority of veteran-class sportsmen and women are long-standing members. The percentage of newcomers is very low. Some federations, however, report renewed interest on the part of the over 60s in the last three years. The increase in membership is especially noticeable in gymnastics, swimming and athletics (walking and cross-country running).

4. The usually compulsory medical examination is the same for all members, except in parachute jumping, where there is a more thorough examination for the over-45s.

5. The great majority of federations neither organise nor take part in international meetings for "veterans". The Athletics League of French-speaking Belgium points out, however, that its best veterans take part in the European and world championships. Participation in international events is also reported in the case of tennis and shooting.

The results of the survey of recognised federations point to the following conclusions:

- the percentage of members of sports federations aged over 60 is very low,

- most of these are long-standing members who have kept up their favourite sport,

- medical examinations are very widespread, but special examinations for the over-60s are uncommon;

- generally speaking, competitions reserved for the elderly are not organised, except in swimming, athletics, gymnastics, tennis and shooting.

The "Senior Sport" Federation founded five years ago (in 1978) brings together 88 clubs which devote their activities specifically to the elderly. The most popular activities are gymnastics, swimming, walking, dancing and pétanque, in that order. The questionnaires returned by 73 out of the 88 clubs show that their 2,244 members include 1,667 women and 577 men, ie 74.25% of women and 25.75% of men, or three women to every one man. Every year the federation organises its own Olympics; in 1982 there were five sports: walking, pétanque, gymnastics, swimming and dancing.

2. SURVEY OF LOCAL AUTHORITIES

ADEPS asked the colleges of burgomasters and aldermen of the towns and villages of the French-speaking community and of Brussels the following questions:

1. Does your municipality have a specific policy on physical activity for the elderly?
   If so, please give details.

2. What percentage of the people concerned takes part in these activities? If unknown, give the actual number of participants.

   How is this sector of your activities financed?
   Who is responsible for these activities (training, financing etc)?

3. Does your municipality organise travel for the elderly?
   If so, is it in Belgium and/or abroad? Are physical activities included in the programme?

A large number of towns and villages of the French-speaking community replied to the questionnaire. Answers were received from 230 out of a total of 281, ie 81.8%, which represents an extremely useful sample.

1.a. Out of the 230 towns and villages from which answers were received, 107 replied to the three questions in the negative, ie 38%. Some negative replies are accounted for by the major financial difficulties with which some towns are faced. It also emerges that some of these municipalities have non-subsidised old people's associations which pursue mainly a cultural and recreational policy.

b. Twenty-five towns and villages say they have a specific policy on physical activity for the elderly. Physical activity is, however, only one of the aspects of the policy these municipalities pursue on behalf of old people. Most of them have an alderman whose duties include policy on the elderly. The name of the department concerned varies from one municipality to another: old people, the family, social affairs, recreation or leisure and culture. Other municipalities have set up an advisory board composed of municipal representatives and heads of old people's associations, or else a semi-public non-profit-making association. In several towns and villages, the CPAS (welfare centres) is responsible for organising and financing physical activities for the elderly. The towns allow associations to use their sports complexes and school gymnasia, or pay for the renting of premises, or share the maintenance and lighting costs. Some use facilities run by ADEPS or are supplied with equipment by it.

c. Another 149 towns and villages stated that although they have no specific policy on physical activity for the elderly, they do nevertheless allow the various old people's associations to use appropriate premises, swimming baths or sports complexes.

2. It is impossible to tell from the answers received what percentage of the population takes part in activities.

The percentages quoted range between 1% and 3% of people over 55, but there is a great deal of fluctuation. Some answers point out that when activities are well organised, the number of participants tends to increase. The most commonly organised activities are gymnastics, sometimes called "keep-fit" exercises, swimming, dancing or folk dancing, walking and pétanque.

Not only may facilities be used free or for a small fee, but also teachers' salaries are paid by the municipality, by a grant from the province or the French Cultural Commission of the Brussels Conurbation, or by ADEPS. The participants sometimes share in the cost of insurance premiums. One municipality reports a levy of one franc per inhabitant towards policy on behalf of the elderly. The people responsible for physical activities are physiotherapists, qualified ADEPS instructors, schoolmasters or holders of a degree in physical education.

3. In all the towns and villages which answered the questionnaire, one or two trips are organised every year in Belgium or abroad. The organisers are either the municipalities themselves or old people's associations. Trips to other countries lasting a week or more are sometimes organised during the "off season" to take advantage of the favourable financial conditions. In some cases the municipality subsidies travel and the cost to the participants is low. All trips are of a recreational and cultural nature. Demand for physical activities is non-existent. At the very most, there is a reference to swimming during a stay by the sea.

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1. Charleroi's efforts on behalf of the elderly deserve mention. The department responsible for old people sent in a remarkable report on the range of cultural and physical activities organised for them. With regard to physical activity, the report mentions gymnastics classes held every week in six sports complexes in the town, totalling 15 hours a week. These classes are given by graduates. Three hours of swimming lessons are given every week in three different sports complexes. Some 300 people attend the gymnastics classes, and half that figure the swimming lessons.

The department also organises ballroom dancing classes (three half-days a week) attended by 150 people and folk-dancing sessions attended by about 50 people for a half-day every week.

The town's aim is to reach as many people as possible in the hope of delaying as long as possible the physical and mental aging of its population.

2. Since its inception, the French Cultural Commission of the Brussels Conurbation has been concerned with the problems of the elderly and in particular with their participation in sport. A set of regulations lays down the conditions governing the provision of grants. The amount of the grant depends, among other things, on the instructors' qualifications. There are regulations on the require aged for admission to courses, the maximum fee, number of people per course, frequency of sessions, instructors' qualifications and insurance policies.

3. SURVEY OF A GROUP OF OLD PEOPLE

ADEPS took part in the Council of Europe's survey on "rationalising sports policies".

The Free University of Brussels was asked to look in particular at one of the groups regarded as disadvantaged from the point of view of sport, namely the elderly. The sample was composed of 50 people over 60 years of age living in Brussels. Old people participating in sport made up 72% of the sample. The average age of the non-participants questioned was 64 years 10 months, while the average age of the participants was 64 years 8 months.

The purpose of the survey was to identify the old people's socio-economic characteristics, find out what their sporting and leisure activities were and determine the reasons which prompted them to choose one sport rather than another or to give up one sport rather than another.

The 50 people were questioned using the basic questionnaire devised for the survey on "rationalising sports policies". This questionnaire was supplemented with an interview. Analysis of the results shows that the group of participants includes more people who have been in higher education and are from a privileged social background.

It is interesting to note that the people with a sporting activity also devote more time to active leisure pursuits. The most common active leisure pursuit is gardening. Of the passive leisure pursuits requiring travel, concerts and plays are more popular with the participants while the non-participants express a preference for lectures. Reading is the most common passive pursuit among both participants and non-participants.

The reason most often given for non-participation in sport is lack of time. That is also the main reason why both participants and non-participants give up a sport. Lack of time is an easy reason to give for non-participation in an activity, yet the reply often reflects insufficent motivation and the lack of a real need for a given activity.

If we consider only the five sports most commonly practised by the participants at the time of the survey, the main reason for the choice, whether it be walking, cycling or gymnastics, is one of health and physical fitness. Pétanque is chosen for reasons of social contact, companionship and friendship while the main reasons for choosing fishing are pleasure and enjoyment.

Among the sports which the people questioned would like to have gone in for when they were younger, we find rather expensive sports requiring a great deal of equipment and a good technique, eg cross-country skiing and tennis. We can say that these are both recent activities in our country and activities which were not practised systematically in education some 30 or 50 years ago. During the interviews the following question was asked: "Which sport would you be prepared to go in for if you were given the opportunity?" No particular wishes were expressed by either the participants or the non-participants. These replies seem to indicate that the participants are satisfied with the activities available to them while the non-participants do not in fact wish to go in for any physical activity of whatever kind.

4. As a contribution to permanent education for old people, the French-speaking universities organise, either individually or on an inter-university basis, physical activities tailored to the people attending permanent education courses. In particular, the Free University of Brussels has started, among other things, physical activity courses in Brussels and Nivelles. These consist of one or two sessions per week.

CONCLUSIONS

Physical activities for the elderly are organised by different public and private bodies. The need for such activities to be organised was self-evident. We note a low but very regular participation wherever a physical activity tailored to the elderly has been set up. The participation rate is tending to increase.

The traditional sports federations are for the most part uninvolved, although some kinds of activity seem to suit senior citizens very well. The sports federations' elderly members are in most cases long-standing members who have kept up their favourite activities. These federations should, we feel, try to be more open to sport for old people.

The sports federations founded specifically to promote sport for old people are an undoubted success and seem to be growing more successful from one year to the next. The most popular activities are, generally speaking, gymnastics, walking, swimming, pétanque and dancing.

The degree to which the municipalities are organised in this field varies greatly. The initiatives of some towns are quite outstanding and enjoy the support of many old people. In other towns and villages they are virtually non-existent. It is perhaps at municipal level that new initiatives should be taken. The towns are in direct contact with their citizens aged 60 and over, while the sports federations are only in contact with those people who are already highly motivated by physical activity.

The various mutual health-care insurance funds also reach a large number of old people. Surely it would be in the interest of these institutions, whose budgets are heavily burdened by care given to elderly patients, to organise physical activities tailored to old people's needs.

It can be seen, therefore, that physical activities for the elderly are organised by a wide variety of bodies. We believe that this situation accurately reflects the attitudes of the people concerned. It seems obvious that physical activities for old people should be promoted in the traditional federations and that it should be hoped that the municipalities and perhaps other bodies too will organise and support initiatives for bringing together those people who discover fairly late in life the benefit and pleasure that can be derived from physical activity.

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50 - ALL TO PLAY FOR - THE SPORTS COUNCIL'S CAMPAIGN FOR THE "MIDDLE AGED"

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SPORTS COUNCIL STRATEGY

The Sports Council Strategy for the Eighties identified several target groups for increasing participation. One of these was the age group 45-59. The reasons for the choice were that for many people this was a time of changing patterns of lifestyle and participation was low. The Sports Council realised that by attracting people of this age to physical activity the habit could carry over into a more active old age. Two specific sub-groups would be emphasised - women and lower socio-economic groups. From 1983-87 it is hoped to bring in 140,000 more men and 180,000 more women.

BACKGROUND

Schemes for promoting physical activity among elderly people have existed for many years, for example Norwich has a very popular leisure club for retired people which employs a full-time leader. The Leisure Department in Alton, Hampshire, runs a flourishing Health and Fun Club which includes social events, holidays and helps with sports courses for handicapped people. Sports Council regions have taken other initiatives in the form of seminars and conferences.

AIM

To create an awareness that physical activity was enjoyable and had much to offer to this age group which, in its turn, had a lot to contribute to sport in its widest sense. Awareness to be sought among three specific sections of the community:

The promoters, ie those with influence upon the consumers - employers, unions, voluntary organisations, professional bodies, the medical profession.

Secondly, the providers of physical activity - specifically local authorities, sports organisations, clubs and voluntary organisations.

Thirdly, the consumers - middle aged people, in particular those who had never taken part in physical activity since leaving school, women, (normally low participants) and lower socio-economic groups, also traditionally low participants.

The benefits to this age group

The emphasis was on enjoyment of the activity for its own sake rather than fitness. It was acknowledged that health and fitness would be enhanced and other benefits would include relaxation, social contacts, interest and involvement. Many people of this age had stressful jobs, others were unemployed and consequently became depressed and demotivated. Many women whose children had left home were lonely and bored.

What this age group can offer

To feel needed and able to make a contribution was vital to self-esteem and sport offered many opportunities for experience, expertise and enthusiasm. To highlight this, one of the publicity leaflets was entitled "Lend a Hand" and illustrated many ways in which people in their fifties could help, for example coaching a junior side, helping a disabled swimming pool, acting as secretary to a sports club.

MARKETING

Although the target group was 45-59, it was felt that the fifties, or 50+, was a more marketable target. The Sports Council decided on a light-hearted approach, stressing the enjoyment to be derived from involvement in physical activity. Thus the slogan "50+ All to Play For" was adopted. 1983 was selected as the main campaign but initiatives would continue throughout the decade. The age of 50 was deliberately blurred so that when encouraging employers to provide opportunities, the middle aged would be the focus.

FINANCE

The Sports Council allocated over £200,000 over two years, largely for publicity. Some money was allocated for participation schemes and it was realised that the value of offering even small amounts in partnership with other agencies was most effective. Money was also made available for the purchase and loan of equipment in certain sports such as short mat bowls, croquet, short tennis and tape recorders for keep fit activities.

PREPARATION OF THE CAMPAIGN

Publicity material

The same light-hearted approach was adopted. The material aimed specifically at the consumers was informal, amusing and classless. Simple language was used with a wealth of cartoons. Seven leaflets were produced, all with similar format. The first identified the general strategy and philosophy, the six others illustrated different areas where participation could be enjoyed: "Out and About", "At the Centre", "In the Park", "On the Water" and "In the Swim", the final one "Lend a Hand". A slide/tape or video presentation was also produced. A wall calendar listed the major sporting events of the year and included much of the material from the leaflets. Badges, car stickers and posters completed the package. Information packs including the leaflets and stickers were prepared specifically for the promoters and providers.

Making the contacts

As the Sports Council relied heavily on the goodwill and co-operation of other people, early contact was essential. These included the many agencies providing sport, ie local authorities, governing bodies of sport and voluntary organisations. In this campaign, other major partners included the medical profession, the Pre-Retirement Association, the Health Education Council and Age Concern as well as employers, unions and holiday-providing firms. Contact was made eighteen months before the start of the campaign to ensure that they had time to plan their involvement and programmes.

Launches

Some fifty launches were held on 13 January 1983 throughout the UK. They presented celebrities from all walks of life and included many local councillors who took part in swimming, keep fit and other activities. The resulting publicity in television, radio and press at national and local level set the campaign off on a lively course.

THE CAMPAIGN

Although there was a central UK direction through the four home countries and the nine English regions of the Sports Council, account was taken of regional differences and many individual initiatives were undertaken. In some cases associations gave national support but in many others the initiatives were more local. Sports organisations varied in their response. A few examples:

Cricket organised an over 50s tournament in one region.

Clay Pigeon Shooting Association awarded special trophies in their national competition.

The Veterans Lawn Tennis Association ran a special tournament.

The Keep Fit Association had a special item in their annual festival.

The Ramblers Association ran a national week of special walks.

Other agencies involved in a variety of ways:

The civil service departments publicised the campaign in their departmental magazines.

The Trades Union Congress Committee saw the audio-visual presentation as did many firms' pre-retirement courses.

One large company asked for the publicity stand at their annual family fun day where 20,000 people gathered.

The Sports Council was able to latch on to many other things:

BBC Television ran a programme "Being 50 in the 80s".

A commercial 50- exhibition invited our co-operation and we collaborated in the book launch of the "50+ Life Guide".

MONITORING

The success of any campaign can only be judged in the fullness of time. So far as publicity goes, this has been the most successful campaign the Sports Council has run and the encouraging factor is that initiatives are still taking place and press publicity is still continuing. It is essential that the initiatives that have been started are not allowed to die and efforts are now being made to ensure that the campaign maintains its impetus over the next decade.

SPORT FOR OLDER PEOPLE IN SWITZERLAND: STRUCTURE AND PROBLEMS

Dr Carl SCHNEITER, Swiss Sports Association, Zurich

Towards the mid-1960s, an enterprising gym teacher began doing gymnastics with middle-aged housewives. She was so successful that further gymnastics groups for older people were formed. Pro Senectute, an association which deals with old people in Switzerland took charge of forming more groups and made arrangements for training instructors. Soon nationwide administrative machinery became necessary and so in 1971 the FGA (Federation of Gymnastics for Older People) was formed. The FGA is an umbrella organisation to which sports and recreational associations are affiliated and which receives financial support from the Swiss Confederation.

The FGA represents sport for older people vis-à-vis the authorities, trains regional instructors and devises types of exercises. The cantons train group instructors, help set up and run new groups. The groups are independent and their members pay the cost of their own activities, including instructors' fees. There are now nearly 400 gymnastics groups with over 60,000 active members, of whom 55,000 are women. The proportion of women to men is thus 10 to 1.

The instructors come from a variety of backgrounds. Some are former gymnasts or sports coaches, others come from recreational backgrounds, with little training in gymnastics or sport in general. This is sufficient for the purpose.

Apart from gymnastics, activities now include dancing, walking and in winter also skiing. In 1979, these additional pursuits were brought into the main stream of activities and the technical committee divided them up into five separate categories. The federation's name was changed to Swiss Federation of Gymnastics and Sport for Older People.

If we look back over the past 15 years of activity, a number of phases may be discerned. To begin with, there was the rapid growth of the gymnastics groups sponsored by Pro Senectute. Pro Senectute's contacts with older people facilitated this development. Consequently, even today gymnastics for older people is often associated with Pro Senectute. The gymnastics clubs did not start until later and their impact is beginning to be felt only now. Some 10,000 people engage in gymnastics for older people. The extension of their activities into specialist areas such as swimming and walking is again due to Pro Senectute. In this area, the gymnastics clubs have sought very little publicity. The sports federations take little interest in sport for the elderly and are not affiliated to the FGA, even though the tennis and curling federations, for example, have very active veterans' groups. Some commercial firms have included sport for the elderly in their programmes, but contacts here are confined to canton level.

After this early whirlwind success, the last two or three years have seen virtual stagnation. The number of new groups falls from year to year and the rate of increase is under 5%. Furthermore, attitudes seem to be changing within the gymnastics-for-older people groups. For example, the instructress of a gymnastics group which had been in existence for 15 years had succeeded over the years in reaching the number of 40 gymnasts, which is no doubt a

a tribute to her own personal qualities. Today, however, the group is down to 20 members. This drop is due to ill health and death. There are virtually no new recruits from among newly retiring people. When one tries to seek out the reasons for this, one often hears remarks such as "we are not yet old enough to join an old people's gym club". As we watch one of this group's sessions, we find some shortcomings in the instructress, who is also now 15 years older. The members who have grown older at the same time as her are not put out by this, but these shortcomings are a stumbling block for the younger ones. What is to be done? Forcibly to replace the instructress would certainly mean the end of this group. There remains the possibility of starting a new group. This example shows how the gymnastics groups in time encounter a generation problem.

Gymnastics and sports clubs open to all age groups have few problems of this kind. The SFG (Federal Gymnastics Society) carried out a survey on this subject. Taking all male active members together, there is a striking thinning-out in numbers in the 35-45 age group. It seems that many gymnasts give up gymnastics after being active members for some years or change over to come other sport. In one male section, only one third of the membership joined the club in younger years and two-thirds are newcomers. This shows that it is possible to find recruits to gymnastics among men over 40. The difficulties lie elsewhere. Many male sections, but also female sections, include age groups with a 40-year spread, ie persons aged from 40 to 80. Of course, the differences in physical ability are enormous.

The SFA and the Swiss Women's Gymnastics Association are accordingly beginning to draw a distinction between men's (or women's) gymnastics, veterans' gymnastics and gymnastics for older people. Small men's gymnastics groups of up to 15 members can work to a common programme. Larger groups have to be split, but as there are usually too few gymnasia available for them to work separately groups are subdivided, with assistant instructors. Warming-up and routine exercises are done together, but the more advanced exercises are done in separate groups. These changes require time but it is already possible to see that sub-division into groups according to capability is an incentive to more active participation, particularly among the elderly and the less robust.

We cannot fully understand what is happening in sport for older people unless we take the environment into account. A survey conducted in a suburb of Berne on the economic situation of retired people has shown that the majority of old people are financially well-off. This finding provoked a general outcry, because it contradicted the widespread notion that old people are poor, weak and in need of help. Accordingly a national survey was commissioned and it confirmed the Berne findings. One detail from this survey: "the financial income of retired people is proportionately lower as the period worked by the people concerned during the period of economic boom was short". That is logical and means, briefly, more or less this: the older a retired person is, the worse off he is financially. We, too, have difficulty in changing our way of thinking. We continue to imagine old people as poor and the kind of gymnastics they can do as very simple, whereas newly retired people are still vigorous, full of initiative and looking for varied sports facilities. We see this every day. The economic boom has not only brought us higher incomes, but also more leisure, a more healthy way of life, the appearance of the fitness fashion and sport for all campaigns. By analogy with what is known about economics, we can now say: the younger a person was at the beginning of the economic boom, the greater chance he has at retirement age of being physically in good shape and keen to practise sport.

This brings us to the following conclusion: those who are in their 60s today are not the same as those who were 60 years old 10 or 20 years ago. The reasons why women of that age no longer wish to join existing gymnastics-for-older people's groups may be other than the mere age difference. What was suitable and successful 10 years ago may not necessarily hold good today.

The present generation of retired people has other needs and other requirements. Here is an example: an organiser of walking excursions for older people recounts that 10 years ago she had a great deal of success with excursions lasting one-and-a-half to two hours. Nowadays, there is no interest in such outings - they have to last at least three to four hours. This same phenomenon is more or less obvious in all areas of sport for older people. They look for more difficult gymnastics, new areas of activity emerge, such as cycling excursions, jogging, skiing etc. One gymnastics session per week is no longer sufficient: they do gymnastics, go out walking, play skittles etc, depending on what is available and what their friends do. That is the situation in sport for older people today. Recreational sport has also invaded the elderly age group.

If there appears to be stagnation in the FGA, that shows that we have not been able to control this development. In his book "Sport, Games and Gymnastics in Later Life" (1), Professor Meusel writes: "The aims of voluntary social institutions are markedly different from those of sport for older people inside the sports federations, in that they are intended for older people with relatively little initiative and help them keep, or again, by means of gymnastic exercises, games and dancing, their agility and well-being, and endeavour to encourage social contacts. But they do not offer training along the lines of sport for older people". I would go even further: these social institutions to not have the specific skills to deal with recreational sport and that is why their activities remain confined to mere movement thereapy. Thanks to decades of experience, the gymnastics and sports federations do have this specific competence and are accordingly able to meet the requirements of recreational sport. Unfortunately, the gymnastics and sports clubs have difficulty in making themselves known to the general public, for a variety of reasons, mainly a shortage of officials. Consequently, sport for older people is faced with the same situation as is well-known in the area of sport for adults, a situation which has led, for example, to the creation of the Sport for All organisation and the Gymnastics for All movement. However, sport for older people is not a mere continuation of sport for adults, so the comparison is not quite accurate. Aging entails losing some of one's physical capabilities. Consequently there will always be weak older people and the work of the social institutions will not diminish that - on the contrary. Gymnastics in old people's homes is still in its infancy. For retired people who still enjoy a sound constitution, aging also means an increase in social factors such as sociability, self-help, leisure. This is an excellent prerequisitie for activities within a club. The Gymnastics for All and Sport for All movements have no need to create their own activities within sport for the elderly but ought to encourage existing clubs to do more for older people.

Finally, let me add one serious, not say grave remark. The transition from movement therapy to recreational sport creates problems which I should like to subsume under the labels "effort" and "risk". Why? Because, the older one grows, the less physical effort one can sustain and this increases risks such as loss of balance, failing reflexes and diminished cardiovascular

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(1) Le sport, le jeu et la gymnastique dans la seconde moitié de l'existence.

capacity. What does this mean in practice? Less strenuous effort. However, we cannot always keep to the lower limit of our capabilities, when motivation and the most striking effects lie in the middle and upper range of those capabilities. The complexity of the efforts-and-risk problem shows once again that sport for older people cannot simply extrapolate from experience in the field of sport for adults. The step that separates movement therapy from recreational sport obliges us to make a careful study of sport for older people, to seek closer co-operation with doctors and scientists, but also to make greater efforts in the training and further training of instructors and administrators. In our small country, we cannot solve this difficult problem alone - we are dependent on international co-operation. I accordingly also thank the organisers at the Council of Europe and the German Sports Institute for having taken the initiative in organising this seminar.

CONCEPTS UNDERLYING DUTCH GOVERNMENT POLICY ON SPORT FOR OLDER PERSONS

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1. INTRODUCTION

In this paper I shall first give you a general impression of the situation in the Netherlands as regards sport for the elderly. Then I shall deal with the reasons behind the Dutch Government's policy in this area, and I shall close with a survey of anticipated future trends.

In recent years, central government policy has been increasingly concerned with exercise for the elderly. It has become more generally acceptable for elderly people to engage in sports, and we are hearing more and more about the desirability of encouraging them to do so for social, recreational and health reasons. Developments in recreational sport prove that it is perfectly possible to practise sports at an advanced age.

2. THE PRESENT SITUATION

Elderly people in the Netherlands mainly engage in sport under the auspices of the More Activity for the Elderly movement, which since the 60s has achieved huge improvements in the range and availability of activities. From a few gym clubs for the elderly dotted around the country run by enthusiastic volunteers, we now have activities taking place in virtually every old people's home, institution for co-ordinated care of the elderly, old people's association etc. The range of activities runs from gymnastics to swimming, folk dancing, walking, cycling, bowls and tenpin bowling.

Partly as a result of this growth, the need to build an infrastructure that would ensure the continuity and co-ordination of the movement was increasingly felt. This need has been met by establishing the national More Activity for the Elderly Organisation (MBvO), which is the joint responsibility of the Sports and Policy on the Elderly Divisions of the Ministry of Welfare, Health and Cultural Affairs.

The development of the MBvO into a national organisation coincides with another trend which greatly increases the chances of establishing a national policy directed towards achieving greater expertise and better organisation and co-ordination. This is the appointment of consultants (and sometimes assistant consultants) in the provinces and large towns. Financial support can be obtained from the state in those areas where consultants have not yet been officially appointed by the provincial or local authorities. The consultants play an important role in advising people on organising activities, running courses etc.

The aim of the MBvO is to keep the elderly functioning physically, mentally and socially as well as possible for as long as possible. Its approach to the subject of exercise for the elderly is based on the idea that exercise helps to maintain and improve physical and mental health; taking part in physical activity with other people, encourages contact and enables the elderly to lead active and purposeful lives for longer.

How has this idea been put into practice? Here are a number of empirical observations, not, I would add, in any specific order:

1. The MBvO is mainly concerned with people over 65;

2. The majority of participants are women;

3. The MBvO largely operates through pre-existing institutions: old people's homes, associations, institutions for co-ordinated care of the elderly, service centres etc;

4.a. The MBvO has close organisational links with institutions concerned with preventive health care for the elderly;

b. In some provinces organisational links with the sporting world have recently been created by allowing the MBvO provincial consultants to sit on sport councils;

5. The MBvO has devoted much attention to improving the expertise of those running activities, with particular reference to the medical aspects of exercise for the elderly, gearing activities to demand and selecting methods to be adopted. The courses developed by the MBvO to train people to run activities for the elderly are officially recognised by the Ministry of Welfare, Health and Cultural Affairs.

6. The elderly do not take much part in sports with other people in the same age group through sports associations. Most sports associations make little effort to keep their members once they have reached a more advanced age or to attract new members from that age group.

I should like to expand a little further on participation by the elderly in sports activities.

In June 1982, the results were published of an extensive survey into the degree to which Dutch people take part in sport and the positive and negative factors by which they are influenced (Institute for Applied Sociology, Nijmegen, Manders and Kropman, "Sporting activities: obstacles and stimuli", June 1982). The survey provided information concerning the actual and desirable level of participation by elderly people in sport, which revealed that:

1. 67% of retired people do not take part in sport, two-thirds of whom say they feel no need to do so. If the group is enlarged to include people over 50, 47% do not take part in sport and roughly half of that percentage do not wish to. Only 6% of those aged between 50 and 75 take part in competitive sports. The figures differ markedly from those for other age groups.

2. Older people mainly prefer to take part in recreational sport outside sports associations.

3. Older people often identify sport with the one-sided image presented by the media ie with competitive sport. They also generally appear to be poorly informed about organised sports activities in their neighbourhood.

4. Of all the characteristics studied in the survey, the most reliable indicator of participation in sport in later life was the degree to which it was practised earlier. This probably explains the limited amount of participation in this age group, since older people had less physical training at school and have had less direct contact with sport etc.

3. THE BASIC PREMISES AND OBJECTIVES OF POLICY ON SPORT FOR THE ELDERLY

Responsibility for the MBvO is principally borne by two departments of the Ministry of Welfare, Health and Cultural Affairs: the policy on the Elderly Division and the Sports Division.

The policy of the former is based on the integration of older people into society. The MBvO, whose aim is to help the elderly to remain full members of society for as long as possible, is a valuable instrument in carrying out this policy.

The Sports Division sees the elderly as one group among many which it wishes to encourage to take exercise, albeit in forms suitable to their age. To sum up, the general objectives of the policy on sport pursued by the two divisions are:

1. to encourage the integration of older people into society;

2. to encourage older people to remain full members of society for as long as possible;

3. to make it possible for the elderly, according to their own choice and ability, to take part in games and sports in a manner appropriate to their state of health and physical condition, or to be involved in them in some less direct way.

Efforts have been underway for some time to improve opportunities to take part in sport as much as possible and to make facilities accessible to those who up to now have not been able to participate. This applies both to active participants and to those who are prepared to do voluntary work in this field. By their very nature, sporting activities provide opportunities to establish social contact in a relaxed atmosphere and this makes the policy of eliminating obstacles to participation even more important.

In line with the policy of decentralisation, central government concentrates on national measures to provide encouragement and create the necessary conditions in which local and provincial authorities can respectively carry out activities and provide direct support for them.

4. DEVELOPMENTS IN THE YEARS AHEAD

I shall now list a number of points on which central government policy will concentrate in the near future in order to ensure a rapid increase in the opportunities for elderly people to take part in physically active forms of recreation.

4.1 Expansion of the target groups

It would be advisable for the MBvO to follow central government in setting the lower age limit at 55. Many people between 55 and 65 are in a similar situation to those over 65. For this reason alone, a reduction in the age limit is desirable.

4.2 Co-ordination

An important aspect of the MBvO's role as a national co-ordination centre is its endeavour to clarify the situation regarding sport for the elderly. Part of this endeavour is its attempt to co-ordinate the view of the future of the MBvO held by the various independent national and provincial bodies.

4.3 Training

A task which has already been taken in hand is that of increasing the number of properly trained instructors and combating the growth of unofficial training courses. Details of a nationwide training system are now being worked out in consultation with all concerned. It is desirable that this system should be capable of training people to different levels in order to cater for the various forms of counselling and supervision involved in activities for the elderly. It will also be necessary to develop and hold refresher courses for those who have already been trained to teach sport.

4.4 Information

The provision of information constitutes another important task. A great number of sources of information have already been established in collaboration with the Ministry of Welfare, Health and Cultural Affairs. These include television advertising, slides, leaflets and posters distributed nationally, and radio broadcasts linked with the provision of information at a provincial level through, for example, the press. In future, publicity must be directed toward informing older people of the opportunities which exist to engage in sport and towards correcting the one-sided view which they have of such leisure pursuits which is a result of identifying the MBvO with professional sport. As was pointed out before in connection with the survey carried out by Manders and Kropman, older people mostly have a very stereotyped view of sport, equating it solely with competitive events requiring considerable physical exertion and ability. It will be necessary to promote the idea of sport as recreation.

4.5 Organisation

It is one of the aims of sport policy to open up organised sport to older people. The existing obstacles to the participation of older people in this type of sport and the virtually total lack of activities designed for them (with the exception of events organised for veterans) must be removed.

This would not only have the advantage that many more older people, particularly men, could be reached: it would also encourage contact between the generations. Older people might also be preapred to undertake certain voluntary work within a sports association, which would enable them to make regarding use of their time while simultaneously helping overcome staff shortages. What is now being advocated is the integration of the MBvO and the sports associations while retaining the character and objectives of the former as they have developed up to now. What could then happen to the advisory role of the provincial MBvO officials requires further study.

Experience in this field can be obtained through local experiments of the kind which have been set up in certain areas by people acting on their own initiative. The government is prepared to participate insofar as funds allow. Occasional lump-sum subsidies might serve to encourage the sports associations to pursue experiments.

The organisation of introductory activities in which older people can find out in practice, without obligation, what sport can mean for them, will have to precede integration. This would also benefit existing activities.

THE TRAINER IN SENIOR SPORT IN THE FEDERAL REPUBLIC OF GERMANY

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Education and activities of trainers in the field of senior gymnastics and sports for the elderly in the Federal Republic of Germany are distinguished by the very different aims and addressees. The spectrum of the groups of addressees covers senior gymnastics in homes for the aged as well as the senior leisure sportsman and the athlete in pensioner's age. The trainers' education and activity thereby is essentially defined by the aims of the associations supporting them. These are on the one hand the German Sports Association (Deutscher Sportbund = DSB) as the head organisation for all trainers active in sports clubs, on the other hand the Federal Community of Public Welfare (Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege), in which the welfare associations of the Federal Republic of Germany have united.

Trainers for senior sport and senior gymnastics

- Education in the Federal Republic of Germany -

Deutscher Sportbund
und Landessportbünde

Deutscher Turner-Bund
und Landesturnverbände

Arbeitsgemeinschaft
der Postsportvereine

Bundesarbeitsgemeinschaft der
Freien Wohlfahrtspflege

Deutscher Caritasverband

Deutsches Rotes Kreuz

Deutscher Kneipp-Bund

Bundesverband Seniorentanz

Verband Sport für betagte Bürger e.V.

Münchengladbach

German Sports Association (DSB)

In 1981 58,937 sports clubs with 17.6 million member were organised in the DSB. A breakdown according to age groups had been attempted by SCHLAGENHAUF (1977) in a survey representative for 1974. Accordingly membership in sports clubs for people over 41 is between 1% (women between 56 and 65) and 33% (men between 41 and 45). For those older than 65 SCHLAGENHAUF (1977, 48) estimates a proportion of 7%. It is open to question how many per cent of these club members do sports regularly. LENK (1972) assumes that in reference to the passive members and the so-called multiple members the number of those really active in DSB clubs must be presumed at about 60% of the statistically registered persons. More exact statistics about the share of active club members in the different age groups are not yet available. Up to now about 56% of the big clubs (with more than 1,000 members) offer groups for the elderly, and even 69% of the clubs with more than 2,000 members. It is that the big clubs only represent 6% of all sports clubs, but their membership within the DSB is about 30% (SEMDER 1982).

The necessity to open the clubs to senior sports by establishing "senior teams", "senior rows" etc, had occasionally been realised more than 50 years ago (GLUCKER 1929). With the activities "Zweiter Weg" (Second Way) - since 1959 - and "Sport für alle" (Sports for everyone) - since 1968 - first efforts have been started to make the clubs' offers more attractive on a wider basis also for the free time sportsman in his middle and senior adult age. Within the framework of these efforts of popular sport competitions for everyone have been established. The keep-fit activities of the DSB whose success is regularly reported in EMNID surveys, are to be categorised here.

In the middle of the 70s specific promotion of sports for the elderly in clubs started with a DSB symposium "Sports for the elderly (SCHMIDT/WOLF 1975) and a model seminar "Sports for the elderly in clubs" WOLF/ROTH 1976). In 1982 the activity "Trimmin 130" followed, which is particularly directed to the age group 30-60.

The teams of speci[illegible]sts and the regional sports associations within the DSB instruct trainers [illegible]h different qualifications (general and special trainers, trainers for the [illegible]uth etc). With regard to the growing number of senior sports groups the DSB has - in the autumn of 1982 - included recommendations for the instruction of trainers in the field of senior sports in its guidelines for trainer instruction. The extent of instruction of 60 teaching units distributes to the contents of instruction as follows:

Table: Trainer in senior sport (Guidelines of DSB)
Extent of instruction: 60 units

1.	Educational-psychological field (aims and effects of senior sport, socio-psychological and group-educational aspects, living situation of the aged)	10
2.	Biological-medical field (anatomy, physiology, medical angles in senior sport and hygienics for the aged)	8
3.	Organisation and the judicial field (organisational measures, constitution of groups for senior sport, insurance, promotion)	2
4.	Kinetics and training theory (development of motor ability and the trainability in age, test items and training planning)	8
5.	Methodology, arrangement of the exercises (structure of training lessons, teacher behaviour, differentiation and forming of groups according to pre-experience, fitness etc)	7

6. Contents of exercises 20

(aptitude of contents of exercises and kinds of sports for the elderly, special contents from senior sports, senior gymnastics, senior dancing, water gymnastics)

7. Teaching exercises and practising 5

(attending lectures and exercises, preparation performance, post-evaluation of exercises)

German Gymnasts' Association (Deutscher Turner-Bund = DTB)

Sports for the elderly has the longest tradition in the German Gymnastics (Deutsche Turnerschaft = DT) and its organisation in succession, the Germany Gymnasts' Association (DTB). Here senior rows were founded as early as the 60s and 70s of the 19th century. The gymnastics club with its offers takes into consideration that among the elderly the proportion of women prevails. The DTB was, except the German dancing sports association, the only sports association in 1975 in which the number of female members over 21 (662,000) surpassed the number of male members (440,000). Even the absolute number of female members over 21 shows the DTB's importance for the sporting activities of the older woman (DTB 662,000, German Football Association 197,000, German Tennis Association 194,000). Since 1983 the DTB has also made endeavours especially for the promotion of senior gymnastics with the activity "Sport and health in gymnastics clubs".

After testing in several model courses the DTB carried out a trainer instruction for senior gymnastics with a range of 60 lessons at present.

Among the regional associations of the DTB the Swabian Gymnasts' Association (Schwäbischer Turnerband = STB) has a special position. In June 1974 the STB organised the seminar "Physical exercises as a help in old age" in Stuttgart. This led to an active co-operation with associations of public welfare and the Stuttgart social security office in the field of trainer instruction and arranging of senior gymnastics courses in Stuttgart old people's homes, clubs for the aged, in parishes, gymnastics clubs, and sports clubs. A programme was developed for the trainer instruction in senior gymnastics (120 lessons), and a model for co-operation between the STB and the public welfare associations for the trainer instruction and care of senior gymnastics groups, so the STB had a forerunner function within the sports associations.

GABLER (BAUR/BETSCH 1976, 9) describes the objective of this senior gymnastics model as follows: "What is essential is man's working order. The better his physical condition, as well as his psychic, spiritual and social condition, the healthier, more productive and active he is, the older he can become". The other special departments organised in the DTB as, for example, the German association of track and field athletics and the German rowing association at present deal with the promotion of senior sports and senior competitions in their kind of sport (cf MEUSEL 1982, 141 ff).

In many special departments there is interest in the fitness of the elderly and the social tasks of sport, but they lag behind in the field of a widespread offer exceeding the special department to realise the objective of senior sports on a wider range. It is only by means of such a completion of the offer in the setting of the exercises that the sports club can open for wider sections of the elderly.

Gymnastics and sports clubs

Whereas the DSB and the special departments determine the frame of the trainer instruction and activity with their regional associations, the trainers' work takes place in the gymnastics and sports clubs or under their sponsorship.

The sports clubs, however, are (this is the rule) not yet prepared for a special offer meeting the wishes and possibilities of people in the second half of their lives according to contents, loading, and conduct, because the clubs have a traditionally strong establishment in competitive sports. Nevertheless, the claim to care also for the physical exercise as a planned health care for the elderly and to offer sport also as a balance to work load was put rather early on the clubs (KRUEMMEL 1930).

Originally the gymnastics and sports clubs were not only preferably a concern of the youth, but also mainly one of the male sex. This was reflected for a long time in the exercises of the clubs. This is why even after World War II a stronger consideration in the needs of women concerning the offer of gymnastics and sports clubs was demanded, especially by establishing women's sections in clubs with up to then exclusively male members. These demands did not remain unheard: from 1959 to 1968 the ratio of men doing sport to women doing sport changed from 7:1 to 4.5:1 (PALM 1968, 1). Several associations and clubs tried to put their work on a wider basis in the sense of the "Second Way" (SCHÖNDORF 1966) by means of a varied trainer instruction. The education of trainers for the methodical care of older leisure sportsmen and women has gradually begun in the last few years. An important thing is that the trainers in the clubs must adapt themselves to the older people's interests even beyond the sporting activities. Principally sports clubs ought to be ready for a co-operation with other organisations which care for people in their middle and old ages in their spare time, such as churches, public welfare and other institutions of old people's welfare.

A change in the members' consciousness and a rearrangement in the club structure would be necessary, however, so that the clubs could look after such educational and social tasks appropriately. Apart from the competitors' promotion the educational and social responsibility for the leisure sportsman and the one for health reasons can be practised. The increasing amount of leisure time, the necessity and the need to compensate the lack of mobility in a main part of the population by sporting activities, and the possibilities for social contacts and experiences in sport do demand a wider opening of the gymnastics and sports clubs to these tasks. On the

part of the sports clubs a more varied offer is necessary, also for senior sportsmen in their spare time, couples, families and children. Instead of an obliging membership a monetary, limited participation ought to be possible more than up to now. Instead of sections courses ought to be established according to needs, their participants could join the clubs as members later on.

Groups for senior sports and gymnastics are joined to sports clubs and associations in different ways:

- integrated as a section in a sports club;
- as a special club joined to a sports association; or
- as a special group under sponsorship care of a sports club.

The "Hamburger Turnerschaft", est. 1816, looks after senior sports in a special section. More than 400 seniors, who were not members, took part in gymnastics, senior dancing, games, rambles, bowling, singing, dance afternoons, and lectures in 1981. As an example for an independent club the club "Sport für betagte Bürger e.V.", Münchengladbach, (See below) is mentioned here. It has joined the "Rheinischen Turnerbund" and the "Deutschen Paritätischen Wohlfahrtsverband". Mainly gymnastics groups in old people's homes are taken care of by sponsorships of sports clubs.

The Federal Association of Public Welfare

The Workers' Welfare Association, the Social Welfare Work, the German Caritas, the German Parity Welfare, the German Red Cross and the Central Social Service for the Jews in Germany - they all belong to the Federal Association of Public Welfare. Their work is substantially supported by the Committee for German Old People's Welfare (Bonn) - also in the section "Mobility up to old age". Here in the instruction of trainers and the care for senior gymnastics groups particularly the German Red Cross and the German Caritas are predominant. They plainly distinguish in their objective and mobility practice from senior sports as practised in sports clubs and associations insofar as they address the little or not exercised elderly, and they want to give them mobility and well-being with the help of gymnastics exercises, mini-games and dance, and to promote social contacts. They do not, however, offer sportslike training in the meaning of senior sports.

The German Red Cross (Deutsches Rotes Kreuz = DRK)

Since 1970 the DRK has offered in an increasing number courses in senior gymnastics under the motto "Mobility up to old age" in its regional and local districts and in old people's homes. According to local conditions they are in the meantime expanded by courses in water gymnastics and senior dancing. For 1983 the number of participants was estimated to be ca. 170,000. More than 3,346 trainers are active for the DRK.

The DRK is open to all senior citizens, regardless of their having been a little sportive or not. The exercises for senior and water gymnastics as well as the forms of dancing are carefully fitted to the elderly's altered capabilities. The mobility programmes ought to offer the possibility of

one's own activity to guarantee for them - as long as possible - an independent life style to improve their participation to social life and to restore or maintain their health.

Accordingly the senior gymnastics of the DRK ought to promote both physical and psychic well-being in a relaxed and cheerful atmosphere, to fight lack of mobility, to avoid loneliness and isolation, and to improve social contacts. Regarding motor capacities one consciously restricts oneself to the regaining and maintaining of a general physical fitness by means of light loading in connection with gymnastic exercises and little games. One does without the integration of training in the special kinds of sport. According to the participants' standards of performance exercises are practised during the lessons or parts of them while they are sitting on chairs. Then equipment such as medicine balls and sticks, as well as gymnastics equipment, is not used. Instead they work with aids easier to handle such as cloth, bag, double clapper and gymnastics ball.

For water gymnastics the physical quality of water is used particularly. Conditional to the water buoyancy exercises are made possible which could not be practised outside the swimming pool with the same effect and intensity. Exercises against the water resistance serve to enforce and stimulate the circulation. Water gymnastics are particularly suitable for non-swimmers. Even older people with mobility handicaps can take part in water gymnastics and so receive a lift in their self-consciousness.

For senior dancing dances from folklore, standard and fashion were changed or simplifed and altered for dancing in a social form. Here the DRK has partially taken over the programme of the Federal Association for Senior Dancing (See below).

To guarantee a uniform mediation of the contents of instruction in the courses of the regional associations, the teachers are trained centrally for the trainer instruction by the general office. For potential trainers no special occupation is required. More important is talent for gymnastics and an interest in old people. Moreover trainers ought to be of normal weight, healthy, between 28 and 55 years old, and physically competitive.

The trainer instruction extends over 1 to 1 1/2 years and includes in 168 lessons the following topics:

Table: Trainer for senior gymnastics (DRK)
Training extent: 185 hours

1.1	General theoretical introduction to contents and forms of senior gymnastics (indications, contra-indications, suitable equipment, little games, rhythmics etc)	16
1.2	Practical testing of senior gymnastics (exercising of contents)	28
1.3	Gymnastics for the participants basic forms of gymnastics (posture training, rhythmics etc)	10

2.	Medical field (aging process, geriatric illness, hygiene, first aid)	30
3.	Psychological and andragogical field (psychology of aging, teaching and learning)	15
4.	Organisation, administration, public relations of the DRK and senior gymnastics	3
5.	Examinations demonstration lesson, written tests and their analysis	18
6.	Practical training care for groups under supervision	65

Trainers who want to attain the trainer licence for "water gymnastics" or "dancing with seniors" can do so by passing the following examination after the basic course for senior gymnastics:

Table: Trainer for water gymnastics (DRK)
Training extent: 99 hours

Qualification: training licence for senior gymnastics

1.	Theory and practice of water gymnastics	34
2.	Practical training: water gymnastics	65

Table: Trainer for senior dancing (DRK)
Training extent: 141 hours

Qualification: trainer licence for senior gymnastics

1.1	Theoretical principles of senior dancing (rhythmics, notation, specialist literature, festivities etc)	12
1.2	Dancing practice (learning and testing)	44
1.3	Gymnastics (loosening up, posture, rhythmics)	6
2.	Psychology, methodology and didactics of dancing	6
3.	Organisation and guidance of a dancing group	1
4.	Examinations (demonstration lesson and analysis of the result)	7
5.	Practical training and report of the same	65

After one year of practical work with at least on group the DRK trainer licence for the completed special field has been attained. The education is carried out according to the instructions for trainers of senior gymnastics (DRK 1979) and water gymnastics (DRK 1980), developed by the DRK's own qualified employees. The trainer instruction for dancing is suited to the instruction programme of the federal association for senior dancing.

Due to the restriction to these three programmes - with a relatively extensive period of instruction - DRK trainers are carefully prepared for their work, even if they have not been previously qualified for this special field.

Federal Association for Senior Dancing (Bundesverband Seniorentanz)

From the previous presentation of some of the programmes of sports for the elderly or senior gymnastics it becomes obvious, that simple forms of dancing, suited to old people, have become an essential part of each programme offering exercise, sports and games for the elderly. Accordingly, next to senior gymnastics (and recently water gymnastics in the DRK), senior dancing is the only special field in sports for the elderly that demands a special trainer licence on the basis of a formulated instruction programme. The educational plan of the federal association for senior dancing shows 120 teaching units. Theory (20 units) includes basic biological facts of the process of aging, psychosomatic problems of old people, the effects of exercise, especially dancing, on health and therapy, andragogical basics and problems in the work of a dancing trainer concerning pedagogics, music, media and organisation. The "practice-orientated theory" (38 units) familiarises the trainer-to-be with the methods of teaching senior dancing, the reading of dance descriptions, the notation, simplifying and transformation of dances as well as with the organisation and the arrangement of a festivity with dances for the elderly. Practice (62 units) involves pre-exercises in dancing and rhythmics, the learning and application of 35 dances for seniors and improvisation.

The instruction courses of the federal association for senior dancing, where already over 3,000 dancing trainers have been instructed from 1974 to 1978, are predominantly aimed at employees of old people's care in the associations of free welfare, the social security offices in cities and local authorities, schools for old people's care, adult education centres and the technical colleges for social education.

The aim of the federal association for senior dancing is "not in the first place dancing, it is the activation of the elderly, which is achieved imperceptibly through dancing. Dancing fundamentally contributes to the activation of forces of the inner self which shall enable the elderly to step out of their former position of the outsider to return to the human society ... The elderly should be enabled to learn to structure the prolonged years of life expectancy, the years 'presented to them' by science and technics, themselves." (Bundesverband Seniorentanz 1980.) There is also an emphasis on the health of the elderly and on the joy of dancing.

Apart from taking walks there hardly seems to be a form of active exercise which can be recommended even to people up to old age without reservation. As experience shows, senior dancing is a suited activity for the elderly, especially with regard to co-ordination and circulation abilities. Even people in their ninth or tenth decade are engaged in it with pleasure and success.

Club "Sports for Senior Citizens" Münchengladbach (Verein "Sport für betagte Bürger e.V." Münchengladbach

In 1968, on the initiative of Käthe Stroetges the club "Sport für betagte Bürger e.V." was founded, in many ways emphasising the main features in the field of senior sports: in the first place by its form of organisation, where a special club is singularly devoted to the sports activities and social care of older people (from the age of 60); in the second place by especially combining the many-sided social and cultural activation of the elderly with sports activities; and finally by including various kinds of sports into their sports offerings, by far exceeding traditional senior gymnastics.

The target group of this "social senior sport" are older people (from the age of 60), "who up to now have stayed away from sports, as well as the residents of homes for the elderly and older patients of nursing wards." (Stroetges 1980)

In 1983 the club included about 2,800 members, among those about 2,700 active participants in 146 groups, who for an annual membership fee of 24 DM and an additional small contribution to their group (not more than a few DM) could choose their sports activity from the following offer: swimming, swimming instruction, water gymnastics, bowling, table tennis, rambling, cycling, volleyball, "Indiaca-Tennis", and basketball. In cases of social hardship the membership fee is reduced or even waived.

The members - aged between 60 and 93 - take part in numerous activities apart from sports, mostly organise their courses and events on their own and are carried to the events by a car service in case they lack sufficient mobility.

The trainers are instructed by the North Rhine-Westfalian Association for Senior Sports ("Nordrhein-westfälischer Verband Sport für betagte Bürger") in collaboration with the club "Sport für betagte Bürger e.V. Münchengladbach" during special courses which are also heavily frequented by members of other organisations. In 1980, three different types of courses were held.

1. A course covering eight fortnightly weekends, aimed at housewives, interested sportsmen, students and trainers.

2. A course for students of technical colleges (Fachhochschüler) in the field of social pedagogics with the stress on old people's care in the first half year of their studies.

3. A compact course over a period of four weeks for persons doing alternative service.

In its "recommendations for the instruction of trainers in the field of senior sports" the club "Sport für betagte Bürger e.V." describes its aims as follows: these sports activities "are part of a concept of livening up to maintain or to regain the physical and mental powers" and are not part of a "law of physical performance". It is a concept of a "social" senior sport, "combining social tasks with health care and that has proved to be a successful way of integration into society for seniors."

The extensive instruction of trainers include:

Table: Trainer for senior sports (Münchengladbach)
Training extent: 210 units

1.	Historical - social field	6
2.	Organisation and administration	6
3.	Biological - medical field, first aid	24
4.	Sports pedagogics, psychology	22
5.	Theory of mobility	6
6.	Experience of mobility in general sports practice DLRG and senior sports, gymnastics, dancing etc.	126
	Examinations	20

In 1974 the regional association "Sport für betagte Bürger" was founded with a membership of 37 local clubs in 1983. The clubs are attached to the "Rheinischer Turnerbund" and the "Deutscher Paritätischer Wohlfahrtsverband". Münchengladbach owns a special centre for senior sports which apart from sports grounds includes other institutions for leisure and social activities.

A further development of this model for a special club for senior sports on the basis of this deserving and so far unique concept "sports for senior citizens" seems realistic and would be desirable. Among other things an enlargement of teaching materials comes to mind which would make for an even better use of the possibilities of senior sports according to the mentioned aims on the existing level of knowledge in sports science.

Conclusions:

Trainer instruction in the Federal Republic of Germany is in the hands of numerous associations which autonomously establish the aims of instruction according to the needs of their target groups and their possibilities for instruction. The slight differences between the educational plans make it impossible to assess precisely the educational contents. Experience however makes it seem likely that among some associations with similar educational plans the practice of instruction differs widely from place to place. It is therefore only possible to argue on the basis of a general analysis with the impressions of training courses and numerous discussions, in how far desiderata remain, and which direction a further development of trainer instruction should preferably take.

1. The instruction of trainers is aimed at caring for seniors in practice who are willing to exercise or to do sports, but not yet at the information and the attracting of so far inactive persons to take part in exercise groups or to establish new exercise groups. (MEUSEL 1982, 216 ff.)

2. This is fed by a certain assumption of existing structures and target groups. It would be desirable to clarify to what extent these assumptions cover the actual needs of the older generation. Only an extensive analysis of target groups could clarify, to what extent different groups of addressees should be approached in a more specific way than before, what kind of training programmes are suited best to their real needs and how the existing structures of organisation could be adapted to these needs.

3. In the practice of trainer instruction there is still an emphasis on the information about the process of aging from a biological point of view and the mediation of practical teaching subjects. It should be clarified to what extent the trainer, apart from the occupying of seniors in practice, is able to influence their self-consciousness, their attitudes and their behaviour and to work at an appropriate shaping of the process of aging in its entirety.

4. Only occasionally a concept seems to accompany the instruction of trainers, that apart from motric activities, wants to activate the senior psychologically and socially and wants to train him on a wide range of activities.

5. The difficulties of changing behaviour in old age suggest starting measures of re-activation before the beginning of retirement age, at least, however, between the age of 50 to 60. The idea of doing sports for a whole lifetime presupposes a re-evaluation of the concepts of a life-long leisure and fitness sport starting with the middle-aged person and also including the former athlete. It is desirable that these basic questions and tasks which are essential to the further development of senior sports, are discussed at a model seminar on a European level, that previous experiences are exchanged, that research programmes are initiated to clarify urgent questions of detail and that further measures for the further development of senior sports are recommended.

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